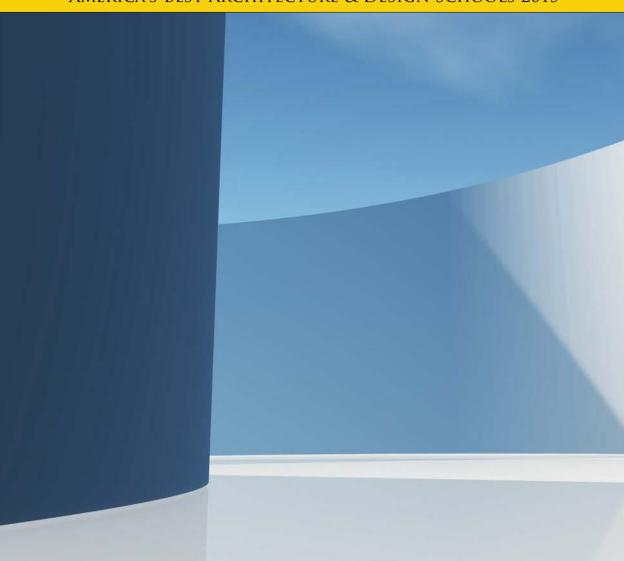
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DesignIntelligence

AMERICA'S BEST ARCHITECTURE & DESIGN SCHOOLS 2015





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DesignIntelligence*

Architecture and Design Careers: Great Today, Better Tomorrow An optimistic assessment on the future of the design professions —James P. Cramer	7
DesignIntelligence 30 Most Admired Educators for 2015	11
Honoring excellence in education and education administration	
America's Best Architecture & Design Schools 2015 The 15th annual rankings from DesignIntelligence, plus deans and student surveys	17
Architecture	18
Landscape Architecture	50
Interior Design	68
Industrial Design	90
Accreditation and Licensure Quick Reference Guide	108

-Glen LeRoy

—Scott Simpson

A Master of Architecture Online: LTU's Educational Experiment

A promising prototype for architectural education

Tips on developing a plan for professional development

School's Out. Now What?

Volume 20, Number 6

110

114

Charting a Path for a Career in Architecture An interview with Yale Graduate Student, Michael Miller	117
On Becoming the New CEO in an Established and Esteemed Company Insights into the process of successful leadership transition —Lisa Henry	119
Research as Core Curriculum in Architecture and Planning Integration of teaching and research as a foundation for creative practice —Robert G. Shibley	122
Lyceum Fellowship: A 30-year Journey Advancing the profession of architecture by engaging students in design and travel —Mark A. Hutker	128
Impacts of Doctoral Education on the Profession On the proliferation of non-history doctoral programs in architecture —Douglas Noble	136
Tenets of the 21st Century Designer Critical skills designers of all types will need in the future —Wayne Li	140
Directory of Leading U.S. Architecture and Design Programs Where they are and the programs they offer	145
DesignIntelligence Research Participants The firms, companies, municipalities, and schools that assisted in research	153



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We wish to extend our heartfelt gratitude to the sponsors of our 13th annual Leadership Summit on Sustainable Design.











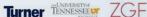














Architecture and Design Careers: Great Today, Better Tomorrow

Often, I get letters and calls asking questions about the future of the design professions. Most of the time, these requests target content and data from our nearly one dozen annual research projects. This information is often used for organizational and professional practice strategic planning.

— James P. Cramer

owever, there is also increasing interest about careers and design education. I'm convinced that design and architecture can be excellent career choices as we look to the future. It's not for the masses. But for people with talent it is a path worth serious consideration.

DesignIntelligence is published for the Design Futures Council. Ninety-five percent of our circulation is among partners, principals, and leaders of professional practices as well as others in corporations and client organizations. However, each November we put together an issue devoted to design education. This results in an altogether different reader profile. Thousands of copies of DesignIntelligence are circulated outside our regular professional audience.

Our research on education was originally motivated by the need of hiring firms and organizations to understand which schools are best preparing their students for the future of the design professions. But it has taken on another life: to better inform future students of their options.

This open letter is for parents and students who are looking to the future with a curiosity about the design professions and about career choices. These are my thoughts on design and architecture education looking forward to 2015 and beyond.

1. Architecture and design has a future.

Our design, construction, and real estate industry will be one of the fastest growing in the world. With the world population exceeding 7 billion and about 75 million people to be added next year, housing and servicing the world's people presents a global challenge and opportunity.

The trends point to increasing demand for architects and designers for generations to come.

Architects and designers are expected to be in increasing demand worldwide. And even with new technologies aiding productivity there will be a shortage of talent. Research reports by the Design Futures Council and the U.S. Bureau of

Labor Statistics point to the need for architects and designers outpacing many other occupations and professions. There will be economic cycles of course, so expect dips from time to time, but the trends point to increasing demand for architects and designers for generations to come.

2. Architecture and design's rigor can be tough but satisfying.

You will pick up valuable lessons not only about design methods but also having to do with people, communications, leadership, and service. These often last a lifetime. The inner drive to create a better world and re-engineer how we inhabit our planet is at the root of what it means to be a designer. For some, it's an innate desire. After all, architecture and design is the residue of civilization

Structures that were erected thousands of years ago still astound us. Beautiful cathedrals that were fashioned by thousands of hands and minds over many decades are just as audacious and dazzling today as when they were first erected.

Students in architecture and design work hard. And most will come to love it.

Today there is a new awakening in the design professions; design changes everything. We've learned that if we can imagine something, we can create it. Learning in this realm is tough but gloriously satisfying. Students in architecture and design work hard. And most will

come to love it. Some will immerse themselves in these studies and in the process discover who they really are and what they can contribute in the future.

3. Architecture and design is a great professional education.

The essence of design is creating value. Whether it's in the making of a new product or building, solving a technical problem, devising innovative ways of doing things, or finding new uses for conventional materials.

Design takes us out of the realm of the familiar and into new territory, creating something valuable in the process. Design changes the way we see the world and the way we move and work within it. It redefines our sense of what is possible and bolsters our sense of worth. As a professional education it is second to none — and it is durable; A lifelong sense of leadership, service, and innovation.

4. Architecture and design is a good generalist education.

A few years ago we did a study of more than 3,000 graduates of the college of architecture, landscape architecture and planning at one of the most prestigious universities in North America. We researched these graduates and tracked 18 data points, ranging from type of workplace to compensation and leadership titles. What did we learn?

Former students headed major banks and Fortune 500 organizations, served as leaders in education, and were deeply involved in public service. One of the major investment banks carefully selected half a dozen graduates for officer positions. Design education creates bridges and the skills are valuable in a wide variety of ways. There is a realization that just about everything that we hear, smell, taste, touch or experience has been designed in some way.

Design provides a common bond of communications across a broad spectrum of populations, linking many minds together. All design exists in relation to its context. Design always has a social dimension because many people feel its impact. The more people who experience it, the more powerful it is and the more it is worth.

Architecture and design education incubates a leadership voice. It is this voice that endures, regardless of the professional track one takes in life.

Architecture and design graduates enter many fields, as it can be a stepping stone to a variety of options. It's an education that incubates a leadership voice. It is this voice that endures, regardless of the professional track one takes in life.

5. Architecture and design requires travel and plenty of your own personal homework.

The degrees in design are a lot of work. No nonchalance permitted. Design always has a cultural dimension because its impact is felt by many communities across the globe. Travel and work will help you begin to understand various value propositions in different cultures.

What is a good building really worth to a community? The answers are complex and varied. Everything we see, touch, or hear has undergone a profound transformation in how it's designed, manufactured, delivered, and become a part of our everyday live. Design creates experiences and communities.

We encourage students to get out of the class room and travel outside their comfort zones. Value creation is the organizing paradigm of design education. And keep this in mind: everything we now know will change. Not because it is wrong but because it can be improved.

A cogent world view is imperative in order to give a mature contribution. Many aspects of the world are ripe for reinvention. When this happens the benefits will be huge. Good design is a win-win for all concerned.

Today's students are the smartest in the history of the profession. They will be leading the way not only in what gets designed, but how the entire process is managed, from beginning to end. As one travels and does homework, there is often an unfolding trait: collaboration at an über-level. When this happens, we get a more

functional and empathetic world. Good design can be powerful.

Architecture and design rankings are flawed. Our rankings are of value and yet they are far from perfect. Some parents and students put too much emphasis on numbered rankings. Sometimes we get calls from people who just want to see the list. They will say, "Just tell me if such and such a school is in the top 20?" That thinking can be dangerous. We want to stress that it is possible — even likely — that an unranked choice may be the best option for some students.

Indeed, there are many dimensions to consider. Don't be the parent or student who ignores the fact that smaller schools, newer schools, and state schools may not have built up as strong of brand repute with the hiring firms. It takes time



America's Best Architecture & Design Schools from *DesignIntelligence* is an attempt to size up educational options in four of the design disciplines. We use triangulation to gather perspective from the key vantage points: practitioners who hire graduates, deans of architecture and design schools, and students.

The results of our surveys should be only the beginning of a broader-based evaluation of whether a school is right for you. As veteran secondary art educator Greg Stanforth wrote in last year's issue, the choice of schools should include considerations as wide-ranging as the geographic setting, availability of co-ops and internships, quality of campus life, and your observation of classes in progress.

While it may be tempting to reduce the criteria to a set of survey results, the decision of which design school is right for you is not so simple. But the complexity of the decision mirrors the scale of the potential reward as you find the place to launch you to a lifetime of fulfilling professional service through design.



James P. Cramer is founding editor of Design-Intelligence and co-chair of the Design Futures Council. He is chairman of the Greenway Group, a foresight management consultancy that helps organizations navigate change to add value.

DesignIntelligence 30 Most Admired Educators for 2015

E ach year, DesignIntelligence honors excellence in education and education administration by naming 30 exemplary professionals in these fields. The 2015 class of education role models was selected by DesignIntelligence staff with extensive input from thousands of design professionals, academic department heads, and students. Educators and administrators from the disciplines of architecture, industrial design, interior design, and landscape architecture are considered for inclusion.

DOUGLAS ALLEN*

Georgia Institute of Technology

Doug Allen was a highly respected professor known for his brilliance in urban planning and historic preservation. He was an outstanding speaker, even in daily classroom settings, with an ability to tell the story of design through history. His passion for the industry, vast knowledge on a variety of topics, and devotion to his students made him an inspiration to all.

RYANN AOUKAR

University of Tennessee, Knoxville

With a background in interior and product design, Ryann Aoukar brings a wealth of knowledge and experience to his classes. He is a "practicing professional who strives for excellence and expects it from his students." Open-minded and incredibly honest, Aoukar pushes his students to think outside the box, improve their work and be their best.

MOHAMMED BILBEISI

Oklahoma State University

Mohammed Bilbeisi is a true inspiration to the next generation of designers. He is a knowledgeable and talented architect who constantly challenges his students to think more deeply about design, encouraging their success in a unique way. His passion for architecture and education shine through his enthusiasm and dedication to students.

MARLON BLACKWELL

University of Arkansas

Marlon Blackwell is an "exemplar as a practicing architect and academic leader." He balances a career as an accomplished architect who creates memorable work with the role of a dedicated educator. He brings a strong design orientation and always provides good criticism; it is evident that he is truly interested in advancing design through both teaching and practice.

^{*} Deceased

TOM BURESH

University of California, Berkeley

An open-minded, creative leader, Tom Buresh is the "heart of the architecture program" at UC Berkeley. As chair of the program, he takes the time to make a personal connection with students. His sense of humor and warmth can lighten an often serious studio mood, yet he also provides a critical and keen eye during reviews.

HANS BUTZER

University of Oklahoma

Hans Butzer is a knowledgeable and successful architect and educator. He is engaging in the classroom, interested in his students' success, and makes critical improvements to the program. He is a thoughtful designer, having done work in the community, connecting with his students in a meaningful way. Communication is encouraged and Butzer makes himself approachable, showing a true passion for the program.

A. JACK DAVIS

Virginia Polytechnic Institute and State U.

Jack Davis' quiet leadership and strong vision has moved Virginia Tech's School of Architecture + Design steadily forward, placing it among the best schools in the country. Davis has "nurtured an environment of intense student driven exploration within a framework of academic and intel-

lectual rigor." Students enter the workforce with a high level of education; they are well-versed in theory as well as practice, displaying rarely matched skills in self-motivation and critical thinking.

EVAN DOUGLIS

Rensselaer Polytechnic Institute

A personable, design-oriented dean, Evan Douglis is an inspirational leader, pushing for the advancement of the school. He is forward thinking and open minded, encouraging students to engage their "interests and objectives with integrity." He is dedicated to the simultaneous advancement of students' careers and studies.

WINKA DUBBELDAM

University of Pennsylvania

As the founder of Archi-Tectonics who focuses on sustainability and technology in buildings, Winka Dubbeldam brings a fresh, new vision to PennDesign, as well as a great new attitude. She is forward-thinking and leads with "clarity and intent, with the purpose of promoting the profession."

JOHN FOLAN

Carnegie Mellon University

John Folan is praised for his no-nonsense method of teaching. A rigorous instructor, he teaches the profession rather than a focus on architecture. He brings real-world experience and real aspects of the industry into his studio, which his students appreciate. Inspiring and hard-working, he motivates his students to go after their future and beat the odds.

OWEN FOSTER

Savannah College of Art & Design

As chair of the industrial design program at SCAD, Owen Foster is a great leader who completely transcends his title to become a mentor and inspiration to each of his students. Helpful and friendly, he creates a great atmosphere both in and out of studio, pushing his students as well as giving them confidence and the tools that each one of them needs to succeed.

ANDREW FREEAR

Auburn University

Andrew Freear is the director of Auburn University's Rural Studio, an off-campus program that gives students a hands-on opportunity to give back to the community through good design. Freear is a humble, dedicated leader, both to the students and the community, and receives great praise for his work.

GLENN GOLDMAN

New Jersey Institute of Technology

Cited as the "most helpful and involved professor," Glenn Goldman receives admiration for his motivational style of teaching. He has found the perfect teaching style;

pushing students to think for themselves yet also being readily available with good design suggestions to help steer them in the right direction. He is focused on the future and technology, and is dedicated to the growth of the program.

KAREN KENSEK

University of Southern California

Karen Kensek is a co-founder of the "NotLY" (Not Licensed Yet) program, a fantastic concept for architectural licensing education. Kensek is also well known for her BIM conferences, which she has been organizing with great success for years. These two incredible efforts have positioned Kensek as a leader in education who provides "a solid link between school and professional practice."

PERRY KULPER

University of Michigan

A methodical and careful observer of the world, Perry Kulper is a supportive and equally critical professor. An exceptional architect, he "understands architecture better than anyone" and pushes his students to think on higher levels. His studios challenge students with unusual topics that force them to think about architecture in unconventional ways. His commitment to technique and teaching are evident.

EUNSOOK KWON

University of Houston

EunSook Kwon founded the University of Houston's industrial design program in 2003 and has used insight to nurture and grow the program. The students graduate with an impressive level of education thanks to Kwon's vision and passion. She encourages each student to achieve their greatness and "motivates everyone whose lives she has touched"

LAURA LAWSON

Rutgers University

Laura Lawson has "transformed an already accomplished program into a great one" by adding faculty, a graduate program, and new facilities and structure to the landscape architecture program at Rutgers. Her vision for the program is driving some impressive positive changes such as linking students to professionals and modernizing the curriculum to better prepare students for the profession.

STEPHEN LEE

Carnegie Mellon University

Stephen Lee is a progressive, flexible thinker with a passion for education and a vision for Carnegie Mellon's architecture program. He has already initiated significant change for the school and is building a curriculum that is innovative yet practical. He views architecture as a problem-solving, and is

focused on connecting student education with the future needs of the profession.

WAYNE LI

Georgia Institute of Technology

Wayne Li is admired for his industry experience and invaluable advice he willingly shares. He brings energy to his classes and is passionate about teaching the next generation of industrial designers. As director of the Innovation and Design Collaborative at Georgia Tech, Li has made great strides in creating new opportunities for faculty and students from a range of disciplines.

ROBERT LIVESEY

Ohio State University

A challenging professor but with a sense of humor, Rob Livesey holds his students to "a high standard in all aspects of their education." With an effective overview of the profession, Livesey has the ability to bridge the gap between the profession and academia; he knows what education new grads need to excel in the workplace.

KIERSTEN MUENCHINGER

University of Oregon

Kiersten Muenchinger founded the product design program at the University of Oregon and continues to grow the program today. She is very knowledgeable in many areas of the industry such as materials, processes and design manufacturing. Muenchinger

drives students by being an incredible role model in design and leadership.

DOUGLAS NOBLE

University of Southern California

Doug Noble is a co-founder of the "NotLY" (Not Licensed Yet) program, as well as PHDiA, as association for doctoral students in architecture. In addition to leading these programs, Noble is an inspiring motivator who pushes students and alumni alike to earn licensure. He works tirelessly to link the alumni back to the school and promote their involvement in the profession and at USC.

JILL PABLE

Florida State University

Some adjectives that students use to describe Jill Pable include involved, dedicated, committed, caring and inspiring. "She believes in all of her students and wants us all to succeed in life." Always readily available with a smile, Pable goes above and beyond for every student. Her research and focus on design for social good is also inspiring to those around her.

STEPHANIE PILAT

University of Oklahoma

A positive, passionate professor, Stephanie Pilat's enthusiasm is contagious. As a world traveler and study abroad professor, she appreciates all styles of architecture and encourages her students to keep an open mind in their work. Pilat takes a true interest in her students' education, placing their needs before her own.

KATE SCHWENNSEN

Clemson University

Kate Schwennsen has brought renewed energy and focus to Clemson's program. A strong advocate for the profession with a clear vision for the school, Schwennsen brings the practical world in the academic world for a more integrated educational experience. She has a very good personal connection with students; she is dedicated to helping them prepare for the profession.

HALE SELEK

Iowa State University

Admired as a caring, attentive and smart educator, Hale Selek is called a role model by many. She shows passion for industrial design and social responsibility. Always positive, Selek is always readily available outside of studio hours. Her students know that she is easy to contact with questions, and they appreciate her dedication to them and their work. "She is truly an inspiration."

MARILYN JORDAN TAYLOR

University of Pennsylvania

Marilyn Jordan Taylor is a brilliant, inspiration leader. She is often cited for her efforts to integrate a variety of subjects in the design programs of PennDesign, including design theory, sustainability and technical issues between architecture, planning and landscape architecture. Taylor is known as strategic and hardworking; she creates opportunities for everyone around her.

JOSEPH "PEPE" VELASQUEZ Arizona State University

An esteemed "prac-ademic," Pepe Velasquez owns his own industrial design practice in addition to being an instructor. He shares his experience and passion for industrial design with his students, keeping them up to date on what is happening in the industry. He is extremely devoted to his teaching, spending a lot of time during and outside of classes and studios to ensure he is providing the maximum amount of support and dedication; a great mentor who really cares about each of his students.

ROB WHITEHEAD lowa State University

Rob Whitehead is described as an enthusiastic, passionate professor. He is admired for his thorough and engaging method of teaching structures as well as his dedication as a studio professor. Whitehead's ability to teach complicated information clearly as well as inspire design ideas through his lectures is admirable. He is open-minded, thinking outside of the box in a logical way, and encourages his students to do so as well.

SARAH WHITING

Rice University

Sarah Whiting receives high praise from faculty, students and professionals for her strong leadership and inspiration to students. She has a great vision for the school and is extremely knowledgeable while maintaining personability and genuine concern for every student in the program. She is insightful, brilliant, enthusiastic and open-minded- a "recipe for success across the board."



DesignIntelligence[®]

AMERICA'S BEST ARCHITECTURE & DESIGN SCHOOLS 2015

RESEARCH METHODOLOGY

America's Best Architecture & Design Schools is conducted annually by *DesignIntelligence* on behalf of the Design Futures Council. The research ranks undergraduate and graduate programs from the perspective of leading practitioners. This 15th annual survey was conducted in mid-2014.

Selected professional practice leaders with direct experience hiring and supervising the performance of recent architecture and design graduates are invited to participate in the research. Survey participants, who are drawn from the Greenway Group database of leading firms throughout the United States, must verify they are currently responsible for hiring or supervising design professionals in each of the design fields for which they respond: architecture, industrial design, interior design, and landscape architecture. Surveys from non-qualifying individuals are excluded from the results

For the four professions surveyed, a total of 1,426 professional practice organizations participated in the research. (See page 153 for a list.)

The professional practice survey queried participants on the question, "In your firm's hiring experience in the past five years, which of the following schools are best preparing students for success in the profession?" In addition, they are queried about additional issues, such as how programs rate in teaching various skills.

DEANS AND CHAIRS SURVEY

In addition to the undergraduate and graduate school rankings by professionals, deans and chairs from 97 academic programs participated in surveys, the data from which is presented separately from the practitioner rankings.

STUDENT SURVEYS

More than 3,840 architecture, landscape architecture, interior design, and industrial design students completed satisfaction surveys about their education, and that data is also presented separately from the rankings.

RESEARCH ASSISTANCE

Research is aided by information from the National Council of Architectural Registration Boards, the National Architectural Accreditation Board, the Landscape Architectural Accreditation Board, the Council for Interior Design Accreditation, and the Industrial Designers Society of America. DesignIntelligence and Greenway Group staff conducted each phase of research.

ARCHITECTURE

"Architecture, of all the arts, is the one which acts the most slowly, but the most surely, on the soul."

- ERNEST DIMNET

ARCHITECTURE

TOP 20 PROGRAMS 2015

In your firm's hiring experience in the past five years, which schools are best preparing students for success in the profession?

UNDERGRADUATE

1.	Cornell	Unive	rsitv

- 2. Calif Polytechnic State Univ., San Luis Obispo
- 3. Rice University
- 4. Virginia Polytechnic Institute and State University
- 5. Syracuse University
- 6. University of Texas at Austin
- 7. Rhode Island School of Design
- 8. Southern California Institute of Architecture
- 9. Pratt Institute
- 10. University of Southern California
- 11. Carnegie Mellon University
- **12.** Auburn University
- 13. Cooper Union
- 14. Rensselaer Polytechnic Institute
- 15. Illinois Institute of Technology
- **16.** Pennsylvania State University
- 16. University of Oregon
- 18. California State Polytechnic University, Pomona
- 19. University of Notre Dame
- 20. University of Arizona

GRADUATE

- 1. Harvard University
- 2. Columbia University
- 3. Yale University
- 4. Massachusetts Institute of Technology
- 5. Cornell University
- 6. University of Michigan
- 7. Rice University
- 7. University of Pennsylvania
- 9. University of Virginia
- **10.** University of California, Berkeley
- 10. Washington University in St. Louis
- 12. University of Texas at Austin
- **13.** Princeton University
- **14.** Virginia Polytechnic Institute and State University
- **15.** University of California, Los Angeles
- **16.** Syracuse University
- 17. Southern California Institute of Architecture
- **18.** Clemson University
- **18.** University of Cincinnati
- 20. Georgia Institute of Technology

Note: Respondents selected from lists of programs accredited by the National Architectural Accrediting Board.

HISTORICAL RANKING OF LEADING PROGRAMS

UNDERGRADUATE

2015	i	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
1	Cornell University	2	1	1	1	1	1	2	1	1	1	2
2	California Polytechnic State U., SLO	1	5	4	3	3	3	4	6	3	4	3
3	Rice University	3	3	5	3	9	8	11	2	3	3	4
4	VA Polytechnic Inst. and State U.	5	7	3	4	4	2	1	4	7	10	4
5	Syracuse University	6	3	7	2	2	4	3	3	7	5	4
6	University of Texas at Austin	4	6	2	7	5	6	6	9	2	8	10
7	Rhode Island School of Design	10	7	6	11	7	4	17	5	5	7	4
8	Southern California Inst. of Architecture	9	2	7	6		19					
9	Pratt Institute	11	11	10	9	15	12	9	14	10		
10	University of Southern California	7	16	12	9	10	12	12	14			
11	Carnegie Mellon University	15	12	11	7	11	7	7	10	9	9	13
12	Auburn University	8	9	14	18	13	12	18	6	15		
13	Cooper Union		16	14	13		20					
14	Rensselaer Polytechnic Institute	17	19		20		20					
15	Illinois Institute of Technology	14		17	14	14	12		13		13	13
16	Pennsylvania State University	13	18	13	16	11	11	9		10	13	
16	University of Oregon	11	13	19	14	7	18	15	14	15	11	11
18	California State Polytechnic U., Pomona	16						15				
19	University of Notre Dame	17	13	14	16		10	12	11	12		9
20	University of Arizona	20			18	12						

GRADUATE

2015	j	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
1	Harvard University	1	1	1	2	1	1	1	1	1	1	1
2	Columbia University	3	2	3	4	4	3	3	9	4	4	3
3	Yale University	2	3	2	3	2	4	13	3	8	2	2
4	Massachusetts Inst. of Technology	4	4	6	5	3	4	2	4	8	4	5
5	Cornell University	5	5	6	6	7	6	3	6			
6	University of Michigan	7	11	8	1		9	8	16		11	7
7	Rice University	5	15	14	16	15	16	10	6	7	9	11
7	University of Pennsylvania	14	15	8	8	11		18	11	4	3	7
9	University of Virginia	18	7	11	14	9	11	13	5	3	8	9
10	University of California, Berkeley	9	7	14	10	9	17	8		13	7	12
10	Washington University in St. Louis	11	9	4	9	11	6	5	6	10	13	12
12	University of Texas at Austin	10	11	11	10	5	9	10	12	6	14	
13	Princeton University	13	15	19	15	11	11	13	12	15	12	6
14	VA Polytechnic Inst. and State U.	12	18		12	8	6	5	10			
15	University of California, Los Angeles	19										
16	Syracuse University				20	19	13		12			
17	Southern California Inst. of Architecture			13	13				17			
18	Clemson University	16	20		20	14	11	10		13		
18	University of Cincinnati	15	10	10	6	6	2	7	2	2	6	4
20	Georgia Institute of Technology	16				17				15		

Note: Programs without numerical ranking in past years scored below the top 20 or did not have an accredited program at that time.

REGIONAL RANKINGS

TOP SCHOOLS IN EACH GEOGRAPHIC REGION BASED ON ALL RESPONSES.

TOP ARCHITECTURE SCHOOLS IN THE MIDWEST

UNDERGRADUATE

- 1. Illinois Institute of Technology
- 2. University of Notre Dame
- 3. Iowa State University

GRADUATE

- 1. University of Michigan
- 2. Washington University in St. Louis
- 3. University of Cincinnati
- Kansas State University
- Ohio State University

Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin

TOP ARCHITECTURE SCHOOLS IN THE WEST

UNDERGRADUATE

- 1. Calif. Polytechnic State U., SLO
- 2. Southern Calif. Inst. of Architecture
- 3. University of Southern California
- 4. University of Oregon
- 5. Calif. State Polytechnic U., Pomona

GRADUATE

- University of California at Berkeley
- 2. University of California, Los Angeles
- 3. Southern Calif. Inst. of Architecture
- 4. University of Southern California
- 5. University of Oregon

Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming

TOP ARCHITECTURE SCHOOLS IN THE EAST

UNDERGRADUATE

- 1. Cornell University
- Svracuse University
- 3. Rhode Island School of Design
- 4. Pratt Institute
- 5. Carnegie Mellon University

GRADUATE

- 1. Harvard University
- 2. Columbia University
- 3. Yale University
- Mass. Institute of Technology
- 5. Cornell University

Connecticut, Delaware, D.C., Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont

TOP ARCHITECTURE SCHOOLS IN THE SOUTH

UNDERGRADUATE

- 1. Rice University
- 2. VA Polytechnic Inst. and State U.
- 3. University of Texas at Austin
- 4. Auburn University
- 5. North Carolina State University

GRADUATE

- 1. Rice University
- 2. University of Virginia
- 3. University of Texas at Austin
- 4. VA Polytechnic Inst. and State U.
- 5. Clemson University

Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia

ARCHITECTURE SKILLS ASSESSMENT

The collegiate programs that hiring firms deem strongest in educating for each skill area.



ANALYSIS & PLANNING

- 1. Harvard University
- 2. Cornell University
- 3. Columbia University
- 4. Massachusetts Institute of Technology
- 5. University of Michigan
- 6. California Polytechnic State U., San Luis Obispo
- 7. University of Pennsylvania
- 8. Virginia Polytechnic Institute and State University
- 8. Yale University
- 10. Clemson University



COMMUNICATION SKILLS

- 1. Harvard University
- 2. Cornell University
- 3. Columbia University
- 4. Yale University
- 5. University of Michigan
- 6. California Polytechnic State U., San Luis Obispo
- 7. Southern California Institute of Architecture
- 8. University of Southern California
- 9. Massachusetts Institute of Technology
- 10. University of Pennsylvania



COMPUTER APPLICATIONS

- 1. Massachusetts Institute of Technology
- 2. Columbia University
- 3. Southern California Institute of Architecture
- 4. Harvard University
- 5. California Polytechnic State U., San Luis Obispo
- 6. Carnegie Mellon University
- 7. Cornell University
- 8. Georgia Institute of Technology
- 8. University of California, Los Angeles
- 10. University of Michigan



CONSTRUCTION METHODS & MATERIALS

- 1. California Polytechnic State U., San Luis Obispo
- 2. Auburn University
- 3. Virginia Polytechnic Institute and State University
- 4. University of Michigan
- 5. Georgia Institute of Technology
- 6. Cornell University
- 6. Massachusetts Institute of Technology
- 8. Harvard University
- 9. Rensselaer Polytechnic Institute
- 10. California Polytechnic Institute, Pomona



CROSS-DISCIPLINARY TEAMWORK

- 1. Harvard University
- 2. Massachusetts Institute of Technology
- Cornell University
- 4. California Polytechnic State U., San Luis Obispo
- 5. Columbia University
- 6. University of Michigan
- 7. Virginia Polytechnic Institute and State University
- 8. Georgia Institute of Technology
- 9. Auburn University
- 10. Yale University



DESIGN SKILLS

- 1. Harvard University
- 2. Southern California Institute of Architecture
- 3. Yale University
- 4. Columbia University
- 5. Cornell University
- 6. Cooper Union
- 7. University of Michigan
- 8. Rhode Island School of Design
- 9. Rice University
- 10. California Polytechnic State U., San Luis Obispo



RESEARCH & THEORY

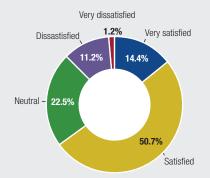
- 1. Harvard University
- Columbia University
- Massachusetts Institute of Technology
- 4. Princeton University
- 5. Yale University
- 6. Cornell University
- 7. Southern California Institute of Architecture
- 7. University of Michigan
- 9. University of California, Berkeley
- 10. Cooper Union
- 10. Georgia Institute of Technology



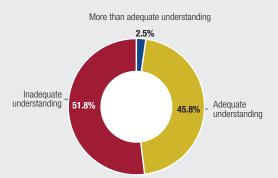
SUSTAINABLE DESIGN PRACTICES & PRINCIPLES

- 1. University of Oregon
- 2. University of California, Berkeley
- 3. California Polytechnic State U., San Luis Obispo
- 4. Massachusetts Institute of Technology
- 5. Auburn University
- 6. Carnegie Mellon University
- 7. Harvard University
- 8. Virginia Polytechnic Institute and State University
- 9. Cornell University
- 10. Georgia Institute of Technology

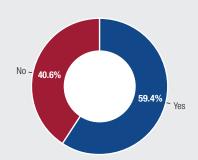
Rate your satisfaction with the state of architecture education in the United States today.



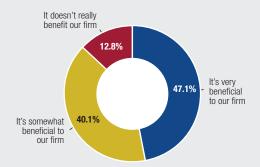
Are students graduating with an adequate understanding of building, facility, and equipment life cycles?



Is your firm benefiting from an infusion of new ideas about sustainability from recent graduate new hires?



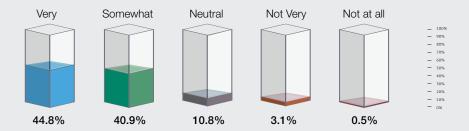
Is it beneficial to your firm when recent graduate new hires had study abroad experience while they were in school?



What is most important in a new graduate entering the workplace? (Multiple responses)

Their attitude/personality	70.1%
Their portfolio	44.8%
Work experience	25.2%
Where they went to school	12.8%
Where they're currently located	2.6%
GPA	1.6%

How important is it to your firm that a new graduate has previous work experience?



The design professions' biggest concerns (Multiple responses)

Sustainability/climate change	54.6%
Maintaining design quality	52.2%
Integrated design	45.7%
Speed of technological change	43.3%
Retaining quality staff in design practices	34.3%
Urbanization	22.2%
Licensing issues	16.3%
Globalization	15.8%
Other	11.2%
Aging of the population	10.8%
Safety/security	3.0%

ARCHITECTURE DEANS SURVEY

This year 78 academic leaders participated in the *DesignIntelligence* Survey of Architecture Deans and Department Heads They answered questions about their own and peer accredited programs in the United States.

Most admired undergraduate architecture programs

1. Rice University 88888

For its small size, excellent dean, long-standing rigor, and quality internship experience.

2. California Polytechnic State University - San Luis Obispo 8888

For its solid technical education, excellent reputation, and continued quality of graduates.

3. University of Cincinnati

For its highly admired mandatory co-op program, design-build opportunities, and multi-disciplinary options.

3. Cooper Union 88

For its rigorous integration of design and technology courses, excellence in design education, and location.

4. Cornell University 88

For its connections with practicing architects, its alumni network, and consistently strong program.

Most admired graduate architecture programs

1. Harvard University 88888

For its general excellence over time, strong faculty, research focus, and high quality work.

2. Massachusetts Institute of Technology 8888

For its research based program, cutting edge technology software and labs, and its global engagement.

3. University of Texas at Austin 🖔 🖔 🖔

For its strong design structure and quality of facilities and faculty.

4 Yale University 88

For its top-notch faculty, connection to research, and high quality work.

5. Columbia University 8

For its excellent faculty, well planned program, and global perspective

Average number of full-time faculty

11111 11111 11111 11111 11111 11111 1 30.9

Average percentage of faculty who are adjunct professors:



36.4%

Average teaching load per academic year for full-time equivalent faculty:



20.5 hours

Average percentage of faculty who are licenced architects:



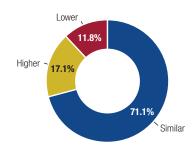
60.5%

Average percent of graduates estimated to take the ARE exam (forecast):

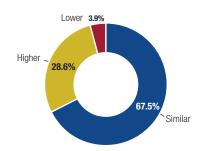


66.6%

Compared to 2014, deans expect their 2015 program budgets to be:



Compared to 2014, deans expect their 2015 student enrollments to be:



The most significant changes in course offerings in the past five years (Multiple responses)

	More emphasis on interdisciplinary collaboration and integrated practice	59.2%
	More emphasis on sustainable design	47.4%
	Study abroad opportunities	46.1%
	More community engagement	40.8%
	More technology integration	38.2%
	Upgrades in technology (hardware or software)	35.5%
	More integrative projects	34.2%
	More emphasis on global issues/international practice	23.7%
	More emphasis on professional practice	22.4%
	More emphasis on urban design	21.1%
	Retention of quality teaching staff	14.5%
	Other	14.5%
The d	esign professions' biggest concerns (Multiple responses)	
	Sustainability/climate change	72.7%
	Speed of technological change	42.9%
	Integrated design	40.3%
	Urbanization	39.0%
	Maintaining design quality	33.8%
	Licensing issues	23.4%
	Globalization	22.1%
	Aging of the population	18.2%
	Other	14.3%
	Retaining quality staff in design practices	10.4%
	Safety/security	2.6%

SAMPLING OF ARCHITECTURE STUDENT SURVEYS

This year 2,619 undergraduate and graduate architecture students registered their opinions in the *DesignIntelligence* student survey. Here is what students said, both overall and by school. Only those NAAB-accredited schools with at least 20 survey participants are represented individually here.

RESPONDENTS

B.A. in Architecture	11.4%
B.S. in Architecture	16.9%
B.S. in Architecture Studies	0.7%
Bachelor of Architecture	36.0%
Master of Architecture	31.6%
M.S. in Architecture	0.9%
Doctor of Architecture	0.5%
Other	2.0%

How they grade the quality of their program overall





Believe they'll be well prepared for their profession upon graduation

Yes	93.1%
No	6.9%

Plan to take the Architect Registration Exam

Yes	83.0%
No	3.9%
Undecided	13.1%

Plan to become a LEED accredited professional

Yes	58.5%
No	5.9%
Undecided	33.6%
Already LEED Al	P. 1.9%

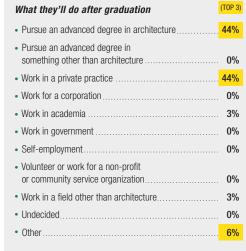
What they'll do after graduation

addation	
Pursue an advanced degree in architecture	19.5%
Pursue an advanced degree in something other than architecture	3.5%
Work in private practice	54.7%
Work for a corporation	3.1%
Work in academia	1.9%
Work in government	0.8%
Self-employment	2.3%
Volunteer or work for a non-profit or community service organization	2.2%
Work in a field other than architecture	1.2%
Undecided	9.2%
Other	1.7%

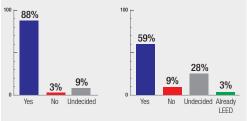
ARIZONA STATE UNIVERSITY



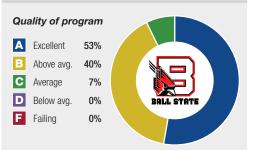
75%Believe they'll be well prepared for their profession upon graduation



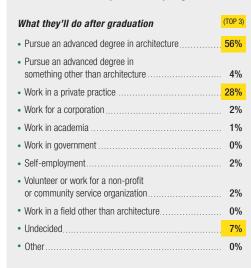
Plan to take the Architect Plan to become a LEED Registration Exam accredited professional

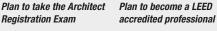


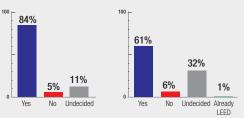
BALL STATE UNIVERSITY



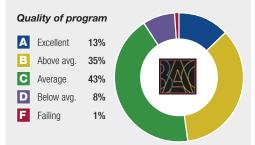
92% Believe they'll be well prepared for their profession upon graduation







BOSTON ARCHITECTURAL COLLEGE

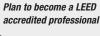


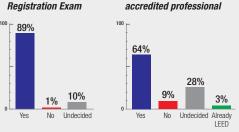
What they'll do after graduation

Believe they'll be well prepared for their profession upon graduation

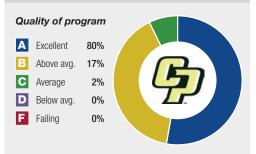
granau	
Pursue an advanced degree in architecture	7%
Pursue an advanced degree in something other than architecture	2%
Work in a private practice	65%
Work for a corporation	2%
Work in academia	1%
Work in government	0%
Self-employment	5%
 Volunteer or work for a non-profit 	
or community service organization	0%
Work in a field other than architecture	0%
• Undecided	14%
• Other	2%

Plan to take the Architect





CAL POLY, SAN LUIS OBISPO



98%

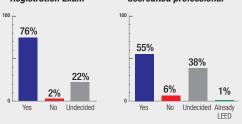
(TOP 3)

Believe they'll be well prepared for their profession upon graduation

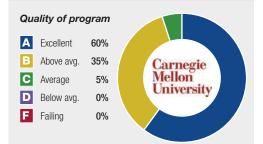
What they'll do after graduation (10	P 3)
Pursue an advanced degree in architecture	9%
Pursue an advanced degree in something other than architecture	3%
Work in a private practice59) %
Work for a corporation	2%
Work in academia)%
Work in government)%
Self-employment 1	۱%
Volunteer or work for a non-profit or community service organization	3%
Work in a field other than architecture	3%
• Undecided 17	7%
• Other	2%

Plan to take the Architect Registration Exam

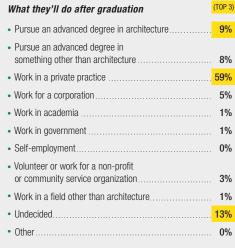
Plan to become a LEED accredited professional



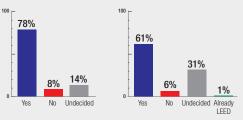
CARNEGIE MELLON UNIVERSITY



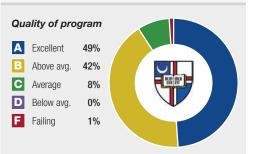
92%Believe they'll be well prepared for their profession upon graduation



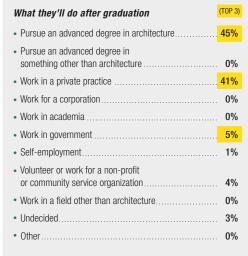
Plan to take the Architect Plan to become a LEED Registration Exam accredited professional

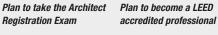


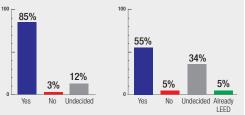
CATHOLIC U. OF AMERICA



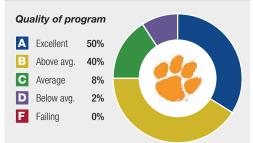
94% Believe they'll be well prepared for their profession upon graduation







CLEMSON UNIVERSITY



88%

Believe they'll be well prepared for their profession upon graduation

What they'll do after graduation	(10P 3)
Pursue an advanced degree in architecture	21%
Pursue an advanced degree in something other than architecture	4%
Work in a private practice	58%
Work for a corporation	4%
Work in academia	0%
Work in government	0%
Self-employment	6%
Volunteer or work for a non-profit or community service organization	0%
Work in a field other than architecture	2%
Undecided	6%
• Other	0%

Plan to take the Architect Registration Exam

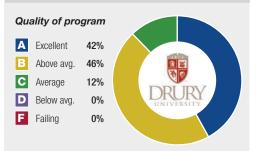
Undecided

85%



Plan to become a LEED

DRURY UNIVERSITY



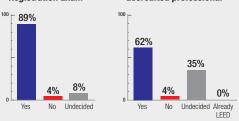
88%

Believe they'll be well prepared for their profession upon graduation

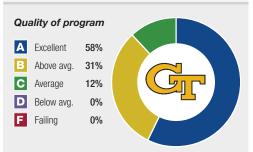
What they'll do after graduation	(TOP 3)
Pursue an advanced degree in architecture	12%
Pursue an advanced degree in something other than architecture	4%
Work in a private practice	50%
Work for a corporation	0%
Work in academia	4%
Work in government	0%
Self-employment	4%
Volunteer or work for a non-profit or community service organization	4%
Work in a field other than architecture	0%
Undecided	19%
• Other	4%

Plan to take the Architect Registration Exam

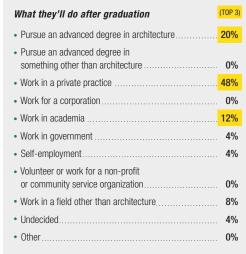




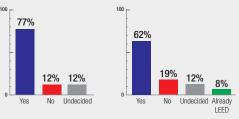
GEORGIA TECH



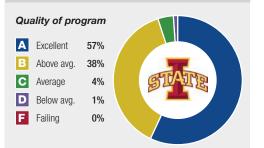
Believe they'll be well prepared for their profession upon graduation



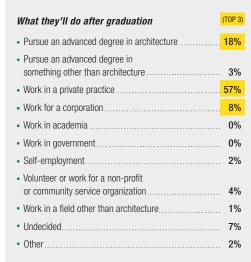
Plan to take the Architect Plan to become a LEED Registration Exam accredited professional

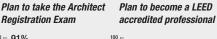


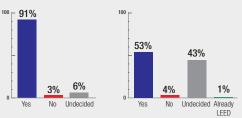
IOWA STATE UNIVERSITY



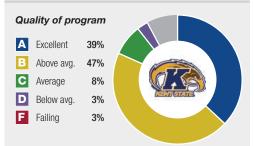
95% Believe they'll be well prepared for their profession upon graduation







KENT STATE UNIVERSITY

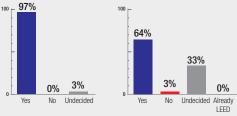


94%

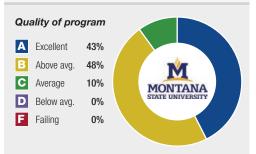
Believe they'll be well prepared for their profession upon graduation

What they'll do after graduation	(TOP 3)
Pursue an advanced degree in architecture	69%
Pursue an advanced degree in something other than architecture	3%
Work in a private practice	20%
Work for a corporation	3%
Work in academia	0%
Work in government	0%
Self-employment	0%
Volunteer or work for a non-profit or community service organization	0%
Work in a field other than architecture	0%
Undecided	0%
• Other	6%

Plan to take the Architect Plan to become a LEED Registration Exam accredited professional



MONTANA STATE UNIVERSITY

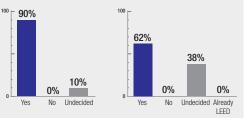


90%

Believe they'll be well prepared for their profession upon graduation

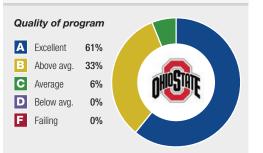
What they'll do after graduation (10	P 3)
Pursue an advanced degree in architecture48	3%
Pursue an advanced degree in something other than architecture	0%
Work in a private practice	3%
Work for a corporation)%
Work in academia	0%
Work in government	0%
Self-employment	0%
Volunteer or work for a non-profit or community service organization	0%
Work in a field other than architecture	0%
• Undecided)%
• Other)%

Plan to take the Architect Registration Exam Plan to become a LEED accredited professional



NJIT Quality of program A Excellent 26% Above avg. 47% 21% Average Below avg. 5% Failing 0% Believe they'll be well prepared for 53% their profession upon graduation (TOP 3) What they'll do after graduation Pursue an advanced degree in architecture...... 11% · Pursue an advanced degree in something other than architecture 11% 6% Work in academia 0% 0% · Volunteer or work for a non-profit 0% or community service organization.....<mark>11%</mark> Plan to become a LEED Plan to take the Architect Registration Exam accredited professional 67% 53% 29% 18% 0% No Undecided Yes Undecided Already

OHIO STATE UNIVERSITY



83%

Believe they'll be well prepared for their profession upon graduation

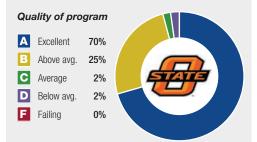
What they'll do after graduation	(TOP 3)
Pursue an advanced degree in architecture	56%
Pursue an advanced degree in something other than architecture	0%
Work in a private practice	28%
Work for a corporation	11%
Work in academia	0%
Work in government	0%
Self-employment	0%
Volunteer or work for a non-profit or community service organization	6%
Work in a field other than architecture	0%
Undecided	0%
• Other	0%

Plan to take the Architect Registration Exam

Plan to become a LEED accredited professional



OKLAHOMA STATE UNIVERSITY



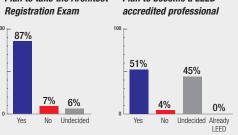
96%

What they'll do after graduation

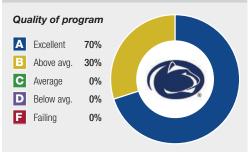
Believe they'll be well prepared for their profession upon graduation

what they'll do after graduation	(101 0)
Pursue an advanced degree in architecture	17%
Pursue an advanced degree in something other than architecture	2%
Work in a private practice	57%
Work for a corporation	8%
Work in academia	4%
Work in government	0%
Self-employment	0%
Volunteer or work for a non-profit or community service organization	1%
Work in a field other than architecture	1%
Undecided	6%
• Other	5%

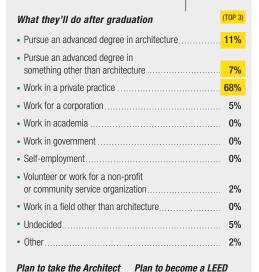
Plan to take the Architect Plan to become a LEED

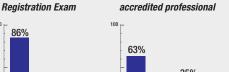


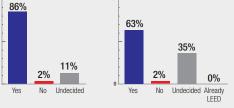
PENNSYLVANIA STATE UNIVERSITY



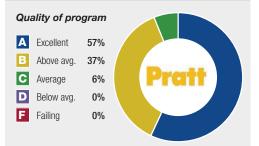
Believe they'll be well prepared for their profession upon graduation







PRATT UNIVERSITY

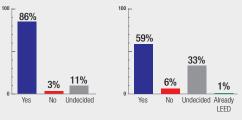


90%

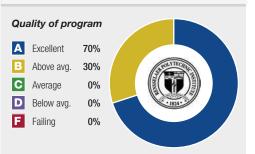
Believe they'll be well prepared for their profession upon graduation

What they'll do after graduation	(TOP 3)
Pursue an advanced degree in architecture	11%
Pursue an advanced degree in something other than architecture	4%
Work in a private practice	56%
Work for a corporation	2%
Work in academia	2%
Work in government	1%
Self-employment	5%
Volunteer or work for a non-profit or community service organization	2%
Work in a field other than architecture	0%
Undecided	16%
• Other	0%

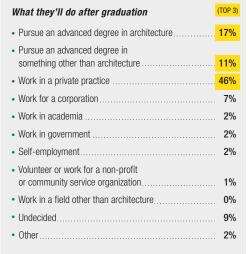
Plan to take the Architect Plan to become a LEED Registration Exam accredited professional

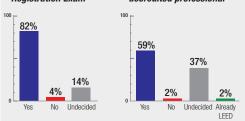


RENSSELAER POLYTECHNIC INST.

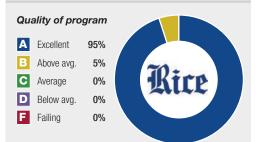


100% Believe they'll be well prepared for their profession upon graduation





RICE UNIVERSITY

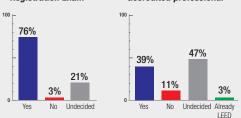


98%

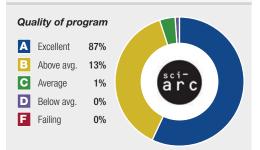
Believe they'll be well prepared for their profession upon graduation

What they'll do after graduation	(TOP 3)
Pursue an advanced degree in architecture	. 5%
Pursue an advanced degree in something other than architecture	3%
Work in a private practice	54%
Work for a corporation	. 3%
Work in academia	10%
Work in government	. 3%
Self-employment	. 0%
Volunteer or work for a non-profit	
or community service organization	. 3%
Work in a field other than architecture	. 3%
Undecided	13%
• Other	. 5%

Plan to take the Architect Plan to become a LEED Registration Exam accredited professional



SCI-ARC

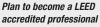


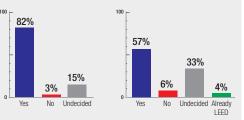
97%

Believe they'll be well prepared for their profession upon graduation

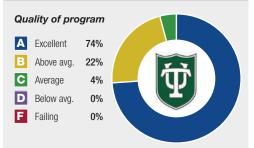
What they'll do after graduation	(TOP 3)
Pursue an advanced degree in architecture	17%
Pursue an advanced degree in something other than architecture	2%
Work in a private practice	56%
Work for a corporation	3%
Work in academia	4%
Work in government	1%
Self-employment	8%
Volunteer or work for a non-profit	
or community service organization	1%
Work in a field other than architecture	2%
Undecided	5%
• Other	0%

Plan to take the Architect Plan Registration Exam acci





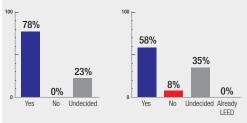
TULANE UNIVERSITY



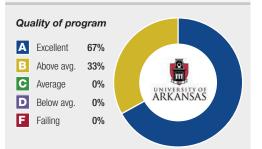
92% Believe they'll be well prepared for their profession upon graduation

(TOP 3) What they'll do after graduation Pursue an advanced degree in architecture...... 4% · Pursue an advanced degree in something other than architecture Work in academia Work in government Self-employment...... · Volunteer or work for a non-profit or community service organization Work in a field other than architecture...... 0% Undecided Other.....

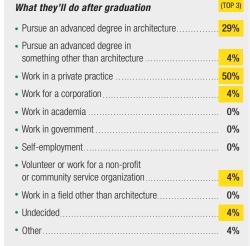
Plan to take the Architect Plan to become a LEED Registration Exam accredited professional

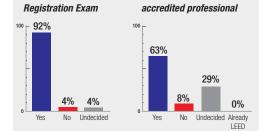


UNIVERSITY OF ARKANSAS



96% Believe they'll be well prepared for their profession upon graduation

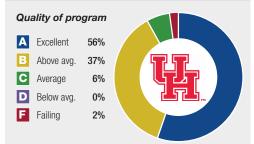




Plan to become a LEED

Plan to take the Architect

UNIVERSITY OF HOUSTON

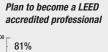


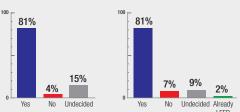
94%

Believe they'll be well prepared for their profession upon graduation

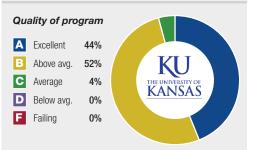
What they'll do after graduation	(TOP 3)
Pursue an advanced degree in architecture	28%
Pursue an advanced degree in something other than architecture	4%
Work in a private practice	50%
Work for a corporation	2%
Work in academia	0%
Work in government	0%
Self-employment	0%
Volunteer or work for a non-profit	
or community service organization	2%
Work in a field other than architecture	2%
Undecided	9%
• Other	4%

Plan to take the Architect Registration Exam





UNIVERSITY OF KANSAS

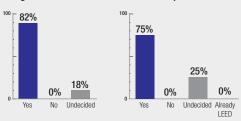


Believe they'll be well prepared for 94% their profession upon graduation

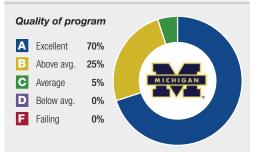
What they'll do after graduation	(TOP 3)
Pursue an advanced degree in architecture	4%
Pursue an advanced degree in something other than architecture	0%
Work in a private practice	71%
Work for a corporation	6%
Work in academia	0%
Work in government	. 0%
Self-employment	3%
Volunteer or work for a non-profit	
or community service organization	6%
Work in a field other than architecture	0%
Undecided	10%

Plan to take the Architect Registration Exam

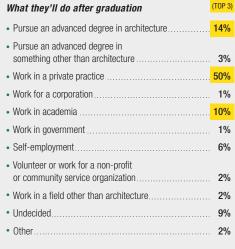
Plan to become a LEED accredited professional



UNIVERSITY OF MICHIGAN



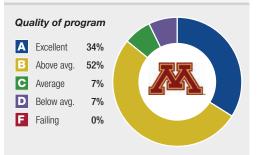
91% Believe they'll be well prepared for their profession upon graduation



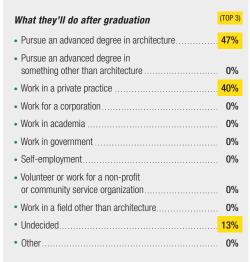
Plan to take the Architect Plan to become a LEED Registration Exam accredited professional



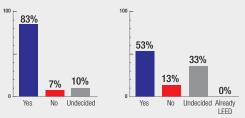
UNIVERSITY OF MINNESOTA



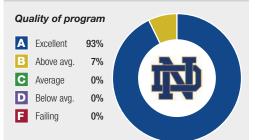
67% Believe they'll be well prepared for their profession upon graduation



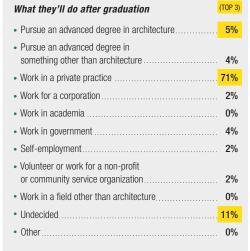




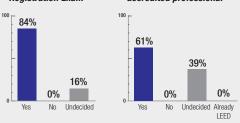
UNIVERSITY OF NOTRE DAME



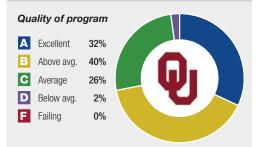
100% Believe they'll be well prepared for their profession upon graduation



Plan to take the Architect Plan to become a LEED Registration Exam accredited professional

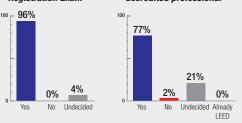


UNIVERSITY OF OKLAHOMA

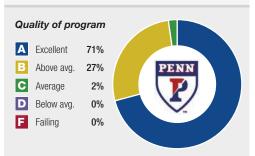


87% Believe they'll be well prepared for their profession upon graduation

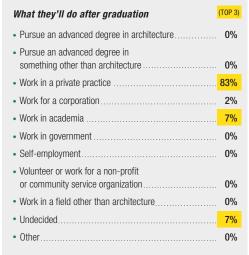
What they'll do after graduation	(TOP 3)
Pursue an advanced degree in architecture	9%
Pursue an advanced degree in something other than architecture	9%
Work in a private practice	70%
Work for a corporation	9%
Work in academia	0%
Work in government	0%
Self-employment	2%
Volunteer or work for a non-profit or community service organization	0%
Work in a field other than architecture	0%
Undecided	0%
• Other	2%

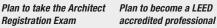


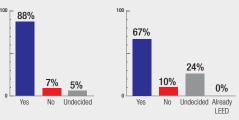
UNIVERSITY OF PENNSYLVANIA



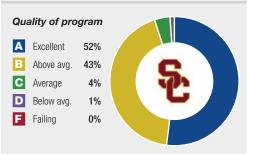
98% Believe they'll be well prepared for their profession upon graduation



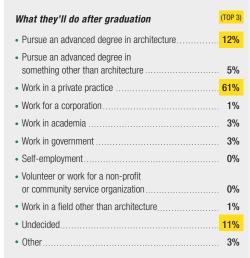


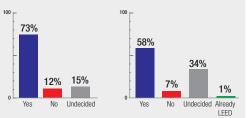


U. OF SOUTHERN CALIFORNIA

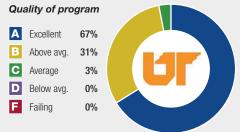


89% Believe they'll be well prepared for their profession upon graduation





UNIVERSITY OF TENNESSEE



92%Believe they'll be well prepared for their profession upon graduation

What they'll do after graduation

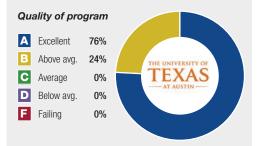
(TOP 3)

Pursue an advanced degree in architecture	11%
Pursue an advanced degree in something other than architecture	3%
Work in a private practice	62%
Work for a corporation	. 3%
Work in academia	. 0%
Work in government	. 0%
Self-employment	. 0%
Volunteer or work for a non-profit or community service organization	. 3%
Work in a field other than architecture	. 0%
• Undecided	16%
• Other	3%

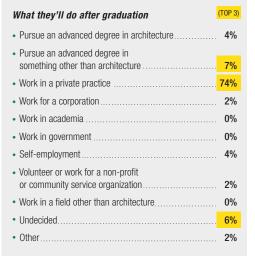
Plan to take the Architect Plan to become a LEED Registration Exam accredited professional

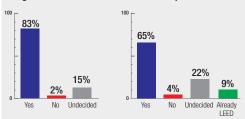


U. OF TEXAS, AUSTIN



100% Believe they'll be well prepared for their profession upon graduation





UNIVERSITY OF VIRGINIA Quality of program A Excellent 64% Above avg. 34% **VIRGINIA** Average 2% Below avg. 0% Failing 0% 100% Believe they'll be well prepared for their profession upon graduation (TOP 3) What they'll do after graduation Pursue an advanced degree in architecture · Pursue an advanced degree in something other than architecture Work in a private practice 78% Work for a corporation...... Work in government 0% · Volunteer or work for a non-profit or community service organization..... 2% Work in a field other than architecture Plan to take the Architect Plan to become a LEED Registration Exam accredited professional 86% 54%

14%

No Undecided

DEBT LOAD

Upon graduation, architecture students anticipate an average debt load of:

\$40,462

DataPoint

DataPoint

B. ARCH. SALARY

The average salary upon graduation for those with a B.Arch degree:*

\$41,767

DataPoint

M. ARCH. SALARY

The average salary upon graduation for those with an M.Arch degree:*

\$46,575

* Source: "2014 Compensation and Benefits Survey," DesignIntelligence, March/April 2014. Does not include bonus, if any.

38%

Undecided Already

No

VIRGINIA TECH Quality of program A Excellent 65% Above avg. 26% Average 6% Below avg. 2% Failing 2% Believe they'll be well prepared for 83% their profession upon graduation (TOP 3) What they'll do after graduation · Pursue an advanced degree in something other than architecture Work in a private practice Work for a corporation...... · Volunteer or work for a non-profit or community service organization..... Work in a field other than architecture. Plan to take the Architect Plan to become a LEED Registration Exam accredited professional 75% 44% 20% 19%

Undecided

No

Undecided Already

DataPoint

INTERN YEAR 1

The average base compensation for a 1st year intern:*

\$38,758

DataPoint

INTERN YEAR 2

The average base compensation for a 2nd year intern:*

\$43,417

DataPoint

INTERN YEAR 3

The average base compensation for a 3rd year intern:*

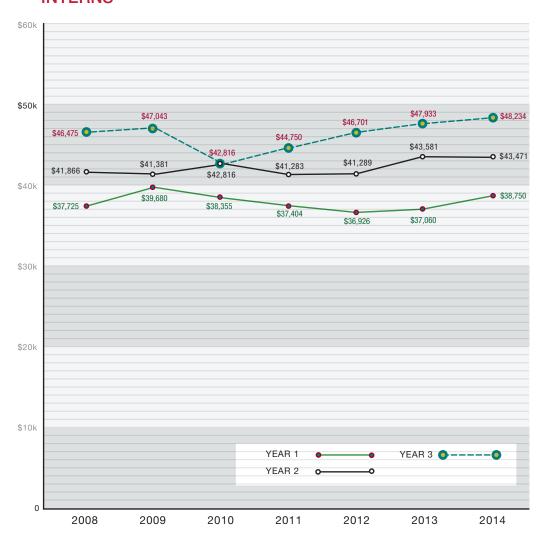
\$48,234

* Source: "2014 Compensation and Benefits Survey," DesignIntelligence, March/April 2014. Does not nclude bonus, if any.

Historical Perspective on Base Compensation

The mean bonus is not calculated in base compensation figures.

INTERNS



^{*} Source: "2014 Compensation and Benefits Survey,"

DesignIntelligence, March/April 2014. Does not nclude bonus, if any.

LANDSCAPE ARCHITECTURE

"The good building is not one that hurts the landscape, but one which makes
the landscape more beautiful than it was before the building was built."

- FRANK LLOYD WRIGHT

LANDSCAPE ARCHITECTURE TOP 15 PROGRAMS 2015

In your firm's hiring experience in the past five years, which schools are best preparing students for success in the profession?

UNDERGRADUATE

1.	Louisiana	State	University
----	-----------	-------	------------

- 2. Pennsylvania State University
- **3.** Cornell University
- 4. California Polytechnic State Univ., San Luis Obispo
- 4 University of Georgia
- **6.** Ohio State University
- **7.** Purdue University
- **8.** Ball State University
- **9.** Texas A&M University
- 10. Virginia Polytechnic Institute and State University
- **11.** Iowa State University
- 12. California State Polytechnic University, Pomona
- 13. University of California at Davis
- 14. University of Wisconsin Madison
- **15.** Michigan State University
- 15. State University of New York, Syracuse

GRADUATE

- 1. Harvard University
- 2. University of Pennsylvania
- 3. Cornell University
- 4. University of California at Berkeley
- 5. Louisiana State University
- 6. University of Virginia
- 7. Rhode Island School of Design
- 8. Kansas State University
- 9. Pennsylvania State University
- 10. University of Georgia
- **11.** University of Texas at Austin
- 12. Ohio State University
- 13. Texas A&M University
- **14.** Ball State University
- **14.** University of Michigan
- 14. Virginia Polytechnic Institute and State University

Note: Respondents selected from lists of undergraduate and graduate landscape architecture programs accredited by the Landscape Architectural Accreditation Board.

HISTORICAL RANKING OF LEADING PROGRAMS

LANDSCAPE ARCHITECTURE

UNDERGRADUATE

2015	j	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005
1.	Louisiana State University	2	1	1	1	2	2	2	1	3	5
2.	Pennsylvania State University	1	3	2	6	5	4	10	1	4	4
3.	Cornell University	7	6	8	8	17	5	6	5	9	6
4.	Calif. Polytechnic State Univ., SLO	4	7	3	8	14	10	15	5	6	8
4.	University of Georgia	5	7	6	3	4	1	3	4	1	2
6.	Ohio State University	6	13	7		9	13	8	9	7	1
7.	Purdue University	3	7	3	3	6	7	5	5	2	7
8.	Ball State University	8	10	9	6	7	8	4	5	11	10
9.	Texas A&M University	8	5	3	2	7	5	6	10	11	
10.	VA Polytechnic Inst. and State Univ.	15	2	13	3	1		15		8	14
11.	Iowa State University	11	11	10	8	11	9	8	15		12
12.	Calif. State Polytechnic Univ., Pomona	10	13			17					
13.	University of California at Davis										
14.	University of Wisconsin - Madison	14			14			15			
15.	Michigan State University	12	13	15				11	13		8
15.	State Univ. of New York, Syracuse	13						12	9		

Note: Programs without numerical ranking in past years scored below the top 15 or did not have an accredited program at that time.

HISTORICAL RANKING OF LEADING PROGRAMS

LANDSCAPE ARCHITECTURE

GRADUATE

2015	i	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005
1.	Harvard University	1	1	1	1	1	1	1	1	1	1
2.	University of Pennsylvania	4	6	4	4	5	11	10	4	2	2
3.	Cornell University	5	3	4	4	9	5	4	11	7	7
4.	University of California at Berkeley	6	10	8	8	15	8	14	13	7	3
5.	Louisiana State University	3	3	2	2	3	3	2	5	4	4
6.	University of Virginia	9	5	7	4	5	5	14	6	5	6
7.	Rhode Island School of Design	11	7	12	8	15	14		6		15
8.	Kansas State University	2	11	3	8	4	8	6	2	6	8
9.	Pennsylvania State University*	7	7								
10.	University of Georgia	8	11	6		5	2	3	3	3	4
11.	University of Texas at Austin	14	13			12	11				
12.	Ohio State University	12			11		12	9	9	10	
13.	Texas A&M University	9	7	8	3	8	4	7	13	12	
14.	Ball State University	15		10		10	5	5			
14.	University of Michigan			15		12	8	8	6	11	8
14.	VA Polytechnic Inst. and State Univ.		2	12	4	2		10		14	

^{*} Pennsylvania State University introduced its MLA program in 2009

Note: Programs without numerical ranking in past years scored below the top 15 or did not have an accredited program at that time.

REGIONAL RANKINGS

TOP SCHOOLS IN EACH GEOGRAPHIC REGION BASED ON ALL RESPONSES.

TOP LANDSCAPE ARCHITECTURE SCHOOLS IN THE MIDWEST

UNDERGRADUATE

- 1. Ohio State University
- 2. Purdue University
- 3. Ball State University
- 4. Iowa State University
- 5. University of Wisconsin Madison

GRADUATE

- 1. Kansas State University
- 2. Ohio State University
- 3. Ball State University
- 3. University of Michigan
- 5. University of Illinois at Urbana-Champaign

TOP LANDSCAPE ARCHITECTURE SCHOOLS IN THE WEST

UNDERGRADUATE

- 1. Calif. Polytechnic State U., SLO
- 2. Calif. State Polytechnic U., Pomona
- 3. University of California at Davis
- 4. University of Washington
- 5. University of Oregon

GRADUATE

- 1. University of California at Berkeley
- 2. Calif. State Polytechnic U., Pomona
- 3. University of Washington
- 4. University of Oregon
- 5. Arizona State University
- Utah State University

Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming

Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri,

Nebraska, North Dakota, Ohio,

South Dakota, Wisconsin

TOP LANDSCAPE ARCHITECTURE SCHOOLS IN THE EAST

UNDERGRADUATE

- 1. Pennsylvania State University
- 2. Cornell University
- 3. State U. of New York, Syracuse
- **4.** Rutgers The State U. of New Jersey
- 5. University of Mass. Amherst

GRADUATE

- 1. Harvard University
- 2. University of Pennsylvania
- 3. Cornell University
- 4. Rhode Island School of Design
- 5. Pennsylvania State University

Connecticut, Delaware, D.C., Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont

TOP LANDSCAPE ARCHITECTURE SCHOOLS IN THE SOUTH

UNDERGRADUATE

- 1. Louisiana State University
- 2. University of Georgia
- 3. Texas A&M University
- 4. VA Polytechnic Inst. and State U.
- 5. North Carolina State University

GRADUATE

- 1. Louisiana State University
- 2. University of Virginia
- 3. University of Georgia
- 4. University of Texas at Austin
- 5. Texas A&M University

Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia

LANDSCAPE ARCHITECTURE SKILLS ASSESSMENT

The collegiate programs that hiring firms deem strongest in educating for each skill area.



COMMUNICATION SKILLS

- 1. Harvard University
- 2. Louisiana State University
- 3. University of Pennsylvania
- 4. Cornell University
- 5. Kansas State University
- 5. Pennsylvania State University



COMPUTER APPLICATIONS

- 1. Harvard University
- 2. University of Pennsylvania
- 3. Louisiana State University
- 4. Pennsylvania State University
- 5. California Polytechnic State U., San Luis Obispo
- 5. Kansas State University



CROSS-DISCIPLINARY TEAMWORK

- 1. Harvard University
- 2. Louisiana State University
- 3. University of Pennsylvania
- 4. Kansas State University
- 5. Pennsylvania State University



DESIGN SKILLS

- 1. Harvard University
- 2. University of Pennsylvania
- 3. Louisiana State University
- 4. Rhode Island School of Design
- 5. Kansas State University
- 5. Pennsylvania State University
- 5. University of Virginia



RESEARCH & THEORY

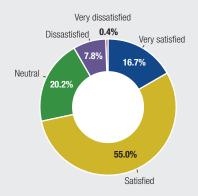
- 1. Harvard University
- 2. University of Pennsylvania
- 3. University of California at Berkeley
- 4. Cornell University
- 5. Louisiana State University



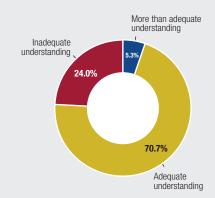
SUSTAINABLE DESIGN PRACTICES & PRINCIPLES

- 1. Harvard University
- 2. University of Pennsylvania
- 3. Louisiana State University
- 4. University of California at Berkeley
- 5. California Polytechnic State U., San Luis Obispo

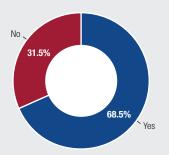
Rate your satisfaction with the state of landscape architecture education in the United States today.



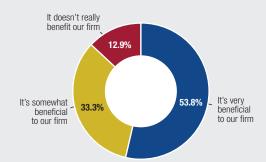
Are students graduating with an adequate understanding of biology, biodiversity, and environmental degradation?



Is your firm benefiting from an infusion of new ideas about sustainability from recent graduate new hires?



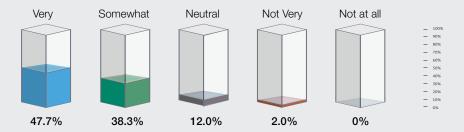
Is it beneficial to your firm when recent graduate new hires had study abroad experience while they were in school?



What is most important in a new graduate entering the workplace? (Multiple responses)

Their portfolio	45.3%
Their attitude/personality	72.7%
Work experience	20.3%
Where they went to school	10.7%
Where they're currently located	3.0%
GPA	0.7%

How important is it to your firm that a new graduate has previous work experience?



The design professions' biggest concerns (Multiple responses)

Sustainability/climate change	55.2%
Maintaining design quality	54.6%
Integrated design	40.9%
Speed of technological change	33.3%
Urbanization	34.0%
Retaining quality staff in design practices	30.1%
Aging of the population	11.4%
Globalization	11.1%
Licensing issues	11.1%
Other	10.8%
Safety/security	5.2%

LANDSCAPE ARCHITECTURE DEANS SURVEY

The responses of 42 education leaders were tallied in the *DesignIntelligence* Survey of Landscape Architecture Deans and Department Heads. These individuals offered their opinions about programs in their own institutions as well as other departments across the United States.

Most admired undergraduate landscape architecture programs

1. Louisiana State University 88888 For its long tradition and continued commitment to design education and research.

2. Cornell University 8888 For its focus on materials of landscapes, intellectual capacity and resources.

3. University of Georgia % % % For its knowledge and skills on a wide variety of topics as well as its service learning.

4. Kansas State University $grak{y}{y}$ For its strong natural resource orientation and excellent faculty.

- 5. Ball State University 8
- 5. SUNY-ESF 8
- 5. University of Oregon 8
- 5. Virginia Tech 8

Most admired graduate landscape architecture programs

1. Harvard University 88888 For its distinguished program, strong resources and faculty, and focus on design.

2. University of Pennsylvania \(\begin{align*} \

3. University of Cal., Berkeley 888 For its social concerns in the urban environment and focus on sustainability.

3. University of Washington \(\mathbb{8} \) \(\mathbb{8} \) For its forward thinking and focus on urban ecological design.

University of Virginia 8 For its national reputation and the caliber of its students and faculty.

Average number of full-time faculty



Average percentage of faculty who are adjunct professors:



22.4%

Average teaching load per academic year for full-time equivalent faculty:



15.4 hours

Average percentage of faculty who are licenced landscape architects:



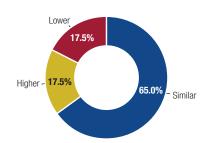
48.0%

Average percent of graduates estimated to take the LARE exam:

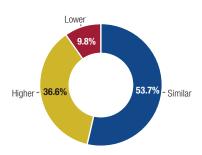


73.0%

Compared to 2014, deans expect their 2015 program budgets to be:



Compared to 2014, deans expect their 2015 student enrollments to be:



The most significant changes in course offerings in the past five years (Multiple responses)

More emphasis on sustainable design	58.5%
More community engagement	48.8%
More emphasis on interdisciplinary collaboration and integrated practice	48.8%
More emphasis on urban design	41.5%
More technology integration	39.0%
More emphasis on global issues/international practice	29.3%
More emphasis on professional practice	29.3%
More integrative projects	24.4%
Upgrades in technology (hardware or software)	22.0%
Other	19.5%
Retention of quality teaching staff	19.5%
Study abroad opportunities	19.5%

$\textbf{The design professions' biggest concerns} \ \textit{(Multiple responses)}\\$

Sustainability/climate change	%
Urbanization 68.3	%
Globalization 36.6	%
Speed of technological change	:%
Maintaining design quality	%
Integrated design	%
Other	%
Aging of the population	%
Retaining quality staff in design practices	%
Licensing issues 9.8	%
Safety/security 4.9	%

SAMPLING OF LANDSCAPE ARCHITECTURE STUDENT SURVEYS

This year 317 students registered their opinions in the *DesignIntelligence* landscape architecture student survey. Here is what students said, both overall and by school. Only those LAAB-accredited schools with at least 10 survey participants are represented individually here.

RESPONDENTS

Undergraduate students	49.8%
Graduate students	49.2%
Doctoral students	0%
Other (including dual-degree and certificate) students	1.0%

How they grade the quality of their program overall





Believe they'll be well prepared for their profession upon graduation

•	_				
Yes.		 	 	 	95.0%
Nο					5.1%

Plan to take the Landscape Architect Registration Exam

Yes	77.5%
No	2.2%
Undecided	20.3%

Plan to become a LEED accredited professional

Yes	50.2%
No	4.1%
Undecided	43.9%
Already LEED A	P. 1.9 %

What they'll do after graduation

Pursue an advanced degree in landscape architecture	4%
Pursue an advanced degree in something other than landscape architecture 5.	7%
Work in private practice	9%
Work in academia	8%
Work in government	6%
Self-employment	0%
Volunteer or work for a non-profit or community service organization 2.5	5%
Work in a field other than landscape architecture	3%
Undecided	7%
Other 3.5	2%

ARIZONA STATE UNIVERSITY

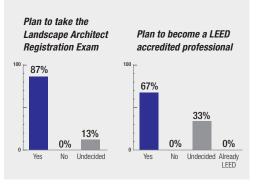


80% Believe they'll be well prepared for their profession upon graduation

What they'll do after graduation

(TOP 3)

Pursue an advanced degree in landscape architecture. 13% Pursue an advanced degree in something other than landscape architecture. 20% Work in a private practice. 20% Work in academia 7% Work in government. 13% Self-employment 7% Volunteer or work for a non-profit or community service organization 7% Work in a field other than landscape architecture 0% Undecided 0%



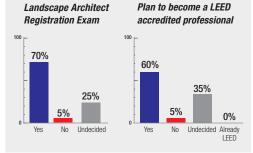
• Other 13%

AUBURN UNIVERSITY



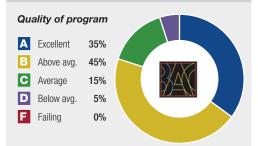
100% Believe they'll be well prepared for their profession upon graduation





Plan to take the

BOSTON ARCHITECTURAL COLLEGE

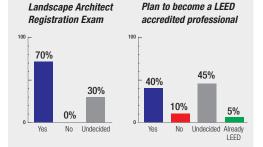


100% Believe they'll be well prepared for their profession upon graduation

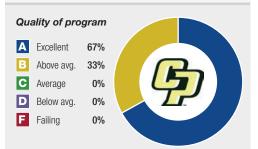
What they'll do after araduation

Plan to take the

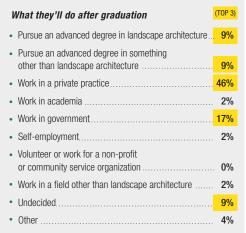
What they if uo after graduation	(
Pursue an advanced degree in landscape architecture	10%
Pursue an advanced degree in something other than landscape architecture	0%
Work in a private practice	50%
Work in academia	0%
Work in government	5%
Self-employment	5%
Volunteer or work for a non-profit	
or community service organization	. 0%
Work in a field other than landscape architecture	0%
Undecided	30%
Other	0%

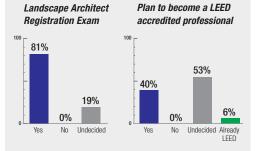


CAL POLY, SAN LUIS OBISPO



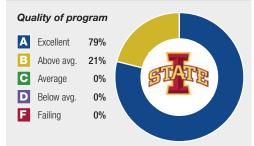
96% Believe they'll be well prepared for their profession upon graduation





Plan to take the

IOWA STATE UNIVERSITY



100% Believe they'll be well prepared for their profession upon graduation

(TOP 3) What they'll do after graduation • Pursue an advanced degree in landscape architecture ... 2% · Pursue an advanced degree in something other than landscape architecture 2% Work in academia Self-employment 0% · Volunteer or work for a non-profit or community service organization 2% • Work in a field other than landscape architecture 2% • Undecided 21%



No

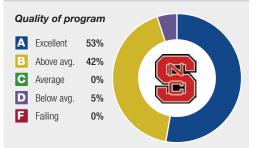
Undecided Already

Yes

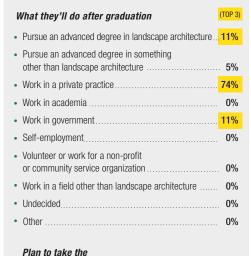
No

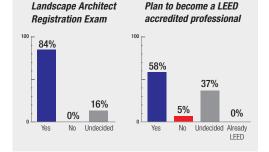
Undecided

NORTH CAROLINA STATE U.

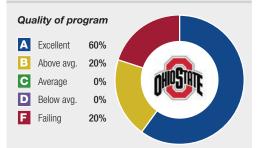


100% Believe they'll be well prepared for their profession upon graduation



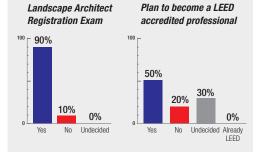


OHIO STATE UNIVERSITY



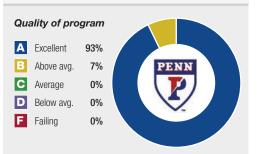
Believe they'll be well prepared for their profession upon graduation

What they'll do after graduation Pursue an advanced degree in landscape architecture... 0% · Pursue an advanced degree in something other than landscape architecture 0% Work in academia 0% · Volunteer or work for a non-profit or community service organization 0% Work in a field other than landscape architecture • Other ________10%

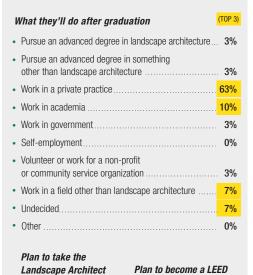


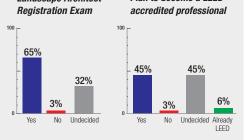
Plan to take the

UNIVERSITY OF PENNSYLVANIA



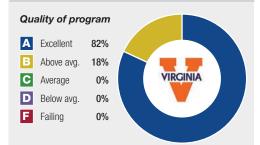
Believe they'll be well prepared for their profession upon graduation





(TOP 3)

UNIVERSITY OF VIRGINIA



100% Believe they'll be well prepared for their profession upon graduation

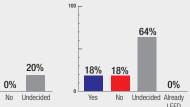
What they'll do after graduation

(TOP 3)

Pursue an advanced degree in landscape architecture	9%
Pursue an advanced degree in something	
other than landscape architecture	0%
·	
Work in a private practice	73%
Work in academia	9%
Work in government	9%
Self-employment	0%
Volunteer or work for a non-profit	
or community service organization	0%
·	
Work in a field other than landscape architecture	0%
Undecided	0%
• Other	0%
04101	3 70



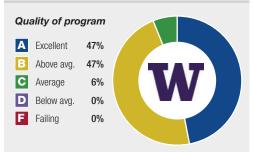
80%



Plan to become a LEED

accredited professional

UNIVERSITY OF WASHINGTON



94% Believe they'll be well prepared for their profession upon graduation

(TOP 3)

6%

6%

What they'll do after graduation



Undecided......

Other

Plan to take the Landscape Architect Registration Exam

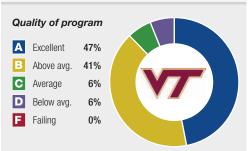
0%

88%



Plan to become a LEED

VIRGINIA TECH



100% Believe they'll be well prepared for their profession upon graduation

What they'll do after graduation

Pursue an advanced degree in landscape architecture... 0%

Pursue an advanced degree in something other than landscape architecture 6%

Work in a private practice 47%

Work in academia 0%

Work in government 18%

Self-employment 0%

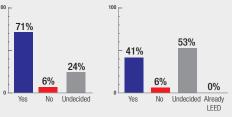
Volunteer or work for a non-profit or community service organization 6%

Work in a field other than landscape architecture 0%

Undecided 18%

Other 6%

Plan to take the Landscape Architect Plan to become a LEED Registration Exam accredited professional



DEBT LOAD

Upon graduation, landscape architecture students anticipate an average debt load of:

\$31,568

DataPoint

DataPoint

SALARY

A landscape architect with 0-4 years of experience can expect to earn approximately: *

\$46,889

 Source: "2014 Compensation and Benefits Survey," DesignIntelligence, March/April 2014.
 Does not include bonus, if any.



"Forgetting something, Mr. Shcmittendorf?"

INTERIOR DESIGN

"Interiors speak! Rooms emphasize whether one exists or lives, and there is a great difference between the two!"

- VAN DAY TRUEX

INTERIOR DESIGN TOP 10 PROGRAMS 2015

In your firm's hiring experience in the past five years, which schools are best preparing students for success in the profession?

UNDERGRADUATE

- 1. Savannah College of Art and Design
- 2. Pratt Institute
- 3. New York School of Interior Design
- 4. Rhode Island School of Design
- **5.** Parsons The New School for Design
- 6. University of Cincinnati
- 7. Fashion Institute of Technology, SUNY
- **8.** Cornell University
- 9. Auburn University

9. Syracuse University

9. VA Polytechnic Institute and State University

GRADUATE

- 1. New York School of Interior Design
- 2. Pratt Institute
- 3. Rhode Island School of Design
- 4. Savannah College of Art and Design
- 5. Parsons School of Design
- **6.** Cornell University
- **7.** Kansas State University
- **8.** School of the Art Institute of Chicago
- 9. Florida International University
- **10.** Drexel University
- **10.** University of Oregon

Note: Respondents selected from a list of undergraduate programs accredited by the Council for Interior Design Accreditation. Because there are few CIDA-accredited graduate programs, many non-accredited programs were listed as choices, and write-in responses were allowed.

HISTORICAL RANKING OF LEADING PROGRAMS

UNDERGRADUATE

2015	j.	2014	2013	2012	2011	2010	2009	2008	2007	2006
1	Savannah College of Art and Design	1	1	1	2					
2	Pratt Institute	2	4	3	2	2	2	2	3	2
3	New York School of Interior Design	7			10	6	14			
4	Rhode Island School of Design	3	2							
5	Parsons The New School for Design	6	8							
6	University of Cincinnati	4	2	3	1	1	2	1	1	1
7	Fashion Inst. of Technology, SUNY					10				
8	Cornell University	8	8	10	6	4	4	3	2	3
9	Auburn University		5	1				4	7	7
9	Syracuse University	8		10	4	10		7	5	7
9	VA Polytechnic Inst. and State Univ.	5	6	8	6		9	5	7	

Note: Programs without numerical rankings scored below the top 10 or did not have an accredited program at that time.

HISTORICAL RANKING OF LEADING PROGRAMS

GRADUATE

2015		2014	2013	2012	2011	2010	2009	2008	2007	2006
1	New York School of Interior Design	5			6		15			
2	Pratt Institute	2	3	3	1	1	1	3	3	2
3	Rhode Island School of Design	3	2	2	2	3	4	2	1	1
4	Savannah College of Art and Design	1	1	1	4	4	5	1	9	4
5	Parsons School of Design	3	4	6	4					
6	Cornell University	6	4	7	2	2	3	5	2	3
7	Kansas State University	7	9	7		7	2	4		
8	School of the Art Institute of Chicago		6	10						
9	Florida International University									
10	Drexel University	7			9		13			
10	University of Oregon		9		6	9		11		

Note: Programs without numerical rankings scored below the top 10 or did not have an accredited program at that time.

REGIONAL RANKINGS

TOP SCHOOLS IN EACH GEOGRAPHIC REGION BASED ON ALL RESPONSES.

TOP INTERIOR DESIGN SCHOOLS IN THE MIDWEST

UNDERGRADUATE

- 1. University of Cincinnati
- 2. Kansas State University
- 3. Miami University
- 4. School of the Art Inst. of Chicago
- 5. University of Missouri

GRADUATE

- 1. Kansas State University
- 2. School of the Art Inst. of Chicago
- 3. University of Minnesota
- 4. Michigan State University
- 5. Columbia College
- 5. Purdue University

Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin

TOP INTERIOR DESIGN SCHOOLS IN THE WEST

UNDERGRADUATE

- 1. University of Oregon
- 2. Ringling College of Art and Design
- 2. School of Visual Arts
- 2. Woodbury University
- 5. California College of the Arts

GRADUATE

- 1. University of Oregon
- Calif. State Polytechnic U., Pomona
- 3. Calif. State University, Long Beach
- 3. Moore College of Art & Design
- 3. Washington State University

Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming



UNDERGRADUATE

- 1. Pratt Institute
- 2. New York School of Interior Design
- 3. Rhode Island School of Design
- 4. Parsons The New School for Design
- Fashion Inst. of Technology, SUNY

GRADUATE

- 1. New York School of Interior Design
- 2. Pratt Institute
- 2. Rhode Island School of Design
- 4. Parsons The New School for Design
- 5. Cornell University

Connecticut, Delaware, D.C., Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont

TOP INTERIOR DESIGN SCHOOLS IN THE SOUTH

UNDERGRADUATE

- 1. Savannah College of Art and Design
- 2. Auburn University
- 2. VA. Polytechnic Inst. and State U.
- 4. Florida International University
- 5. University of Florida

GRADUATE

- 1. Savannah College of Art and Design
- 2. Florida International University
- 3. University of Florida
- 4. Auburn University
- 4. Florida State University

Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia

INTERIOR DESIGN SKILLS ASSESSMENT

The collegiate programs that hiring firms deem strongest in educating for each skill area.



- 1. New York School of Interior Design
- 2. Pratt Institute
- 3. Rhode Island School of Design
- 4. Parsons The New School for Design
- 4. Savannah College of Art and Design, Savannah



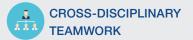
- 1. New York School of Interior Design
- 2. Pratt Institute
- 3. Rhode Island School of Design
- 4. Savannah College of Art and Design, Savannah
- 5. Parsons The New School for Design



- 1. New York School of Interior Design
- 2. Pratt Institute
- 3. Savannah College of Art and Design, Savannah
- 4. Rhode Island School of Design
- 5. Virginia Polytechnic Inst. and State University



- 1. Pratt Institute
- 2. New York School of Interior Design
- 3. Rhode Island School of Design
- 4. Cornell University
- 5. Parsons The New School for Design

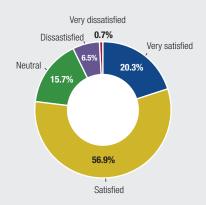


- 1. New York School of Interior Design
- 2. Pratt Institute
- 3. Rhode Island School of Design
- 4. Parsons The New School for Design
- 5. Savannah College of Art and Design, Savannah
- 5. University of Cincinnati

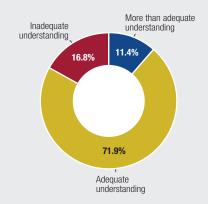


- 1. New York School of Interior Design
- 2. Pratt Institute
- 3. Philadelphia University
- 3. Savannah College of Art and Design, Savannah
- 5. Parsons The New School for Design
- 5. Virginia Polytechnic Inst. and State University

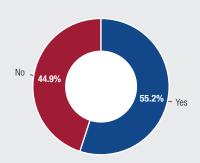
Rate your satisfaction with the state of interior design education in the United States today.



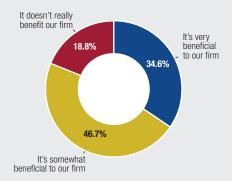
Are students graduating with an adequate understanding of sustainable materials and the procurement and recycling processes?



Is your firm benefiting from an infusion of new ideas about sustainability from recent graduate new hires?



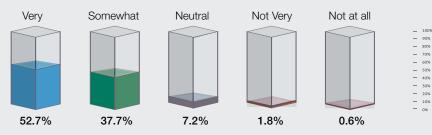
Is it beneficial to your firm when recent graduate new hires had study abroad experience while they were in school?



What is most important in a new graduate entering the workplace? (Multiple responses)

Their attitude/personality	68.3%
Their portfolio	
Work experience	28.1%
Where they went to school	
Where they're currently located	
GPA	

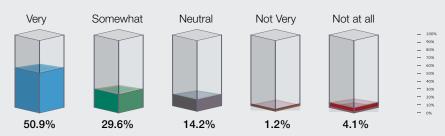
How important is it to your firm that a new graduate has previous work experience?



The design professions' biggest concerns (Multiple responses)

Maintaining design quality	6.5%
Retaining quality staff in design practices	9.4%
Speed of technological change	8.2%
Integrated design	6.4%
Sustainability/climate change	4.5%
Licensing issues	24.4%
Globalization	19.1%
Urbanization	6.6%
Other	6.0%
Safety/security	6.0%

How important is it to your firm if a new graduate has graduated from a CIDA-accredited school?



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INTERIOR DESIGN DEANS SURVEY

The *DesignIntelligence* Survey of Interior Design Deans and Department Heads collects the perspectives of 69 academic leaders weighing in on the status and progress of their own and peer programs.

Most admired undergraduate interior design programs

- **1. University of Cincinnati** 88888 For its often cited co-op program, strong faculty and rigorous program.
- **2. Florida State University** 8888 For its innovative student projects and highly admired faculty.
- 3. University of Oregon & & & S

 For its environmental focus and inter-disciplinary collaboration among disiplines.
- **4. Pratt Institute 8 8** For its strong design program and collaborative design studios.
- **4. U. of North Carolina-Greensboro** 🖔 🖔 For its focus on creative environments and emphasis on sustainability.

Most admired graduate interior design programs

- Florida State University 88888
 For its excellence in both applied and theoretical work, and the quality of the graduates.
- 2. **Pratt Institute** 8888 For its strong professional connections and collaborative teaching environment.
- **3. Cornell University** \(\mathbb{9} \) \(\mathbb{9} \) For its high quality program and research.
- **4. Kansas State University** 8 8 For its integrated curriculum and range of opportunities.
- **4. University of Minnesota** & & For its extreme research focus and continued strength in evidence-based design.

INTERIOR DESIGN

Average number of full-time faculty



Average percentage of faculty who are adjunct professors:



30.9%

Average teaching load per academic year for full-time equivalent faculty:

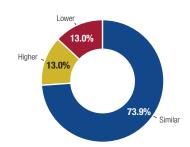


17.3 hours

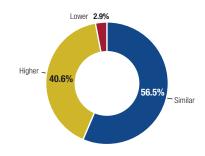
Average percentage of graduates that plan to take the National Council for Interior Design Qualification Exam (forecast):



Compared to 2014, deans expect their 2015 program budgets to be:



Compared to 2014, deans expect their 2015 student enrollments to be:



The most significant changes in course offerings in the past five years (Multiple responses)

More emphasis on interdisciplinary collaboration and integrated practice	58.0%
More technology integration	49.3%
Upgrades in technology (hardware or software)	49.3%
More emphasis on sustainable design	40.6%
More community engagement	36.2%
More emphasis on professional practice	31.9%
Study abroad opportunities	24.6%
More emphasis on global issues/international practice	26.1%
More integrative projects	26.1%
Retention of quality teaching staff	15.9%
Other	10.1%
More emphasis on urban design	7.2%

The design professions' biggest concerns (Multiple responses)

Sustainability/climate change	52.9%
Aging of the population	45.6%
Speed of technological change	41.2%
Licensing issues	39.7%
Integrated design	33.8%
Maintaining design quality	23.5%
Globalization	22.1%
Retaining quality staff in design practices	16.2%
Safety/security	11.8%
Urbanization	11.8%
Other	5.9%

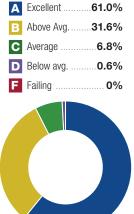
SAMPLING OF INTERIOR DESIGN STUDENT SURVEYS

This year 545 students registered their opinions in the *DesignIntelligence* interior design student survey. Here is what students said, both overall and by school. Only those CIDA-accredited schools with at least 10 survey participants are represented individually here.

RESPONDENTS

Undergraduate students	76.6 %
Graduate students	20.7%
Doctoral students	1.9%
Other (including dual-degree and certificate) students	0.6%

How they grade the quality of their program overall



Believe they'll be well prepared for their profession upon graduation

Plan to take the National Council for Interior Design Qualification Exam

Yes 76.6%
No 3.7%
Undecided19.7%

Plan to become a LEED accredited professional

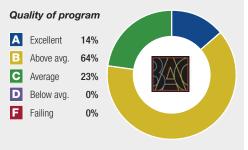
B accidanted professiona
Yes 56.4%
No 3.5%
Undecided 37.1%
Already I FED AP 2 9%

What they'll do after graduation

Pursue an advanced degree in interior design/interior architecture	
Pursue an advanced degree in something other than int. design/int. architecture.	3.7%
Work in private practice	.57.2%
Work for a corporation	. 11.0%
Work in academia	2.3%
Work in government	0.4%
Self-employment	3.5%
Volunteer or work for a non-profit or community service organization	1.3%
Work in a field other than interior design/interior architecture	0.8%
Undecided	8.3%
Other	2.3%

ARIZONA STATE UNIVERSITY Quality of program A Excellent 50% Above avg. 44% Average 0% Below avg. 6% Failing 0% Believe they'll be well prepared for **75**% their profession upon graduation (TOP 3) What they'll do after graduation Pursue an advanced degree in interior design · Pursue an advanced degree in something other than interior design/interior architecture 13% 0% · Volunteer or work for a non-profit or community service organization..... 0% · Work in a field other than int. design/ int. architecture ... 6% • Other..... Plan to take the NCIDO*? Plan to become a LEED accredited professional 75% 63% 31% 19% 0% No No Undecided Undecided Already * National Council for Interior Design Qualification Exam

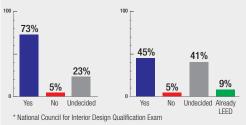
BOSTON ARCHITECTURAL COLLEGE



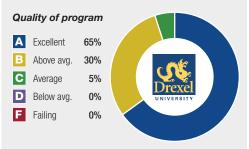
91%

Believe they'll be well prepared for their profession upon graduation

What they'll do after graduation	(TOP 3)
Pursue an advanced degree in interior design	. 5%
Pursue an advanced degree in something other	
than interior design/interior architecture	5%
Work in a private practice	64%
Work for a corporation	5%
Work in academia	. 0%
Work in government	5%
Self-employment	14%
Volunteer or work for a non-profit	
or community service organization	5%
\bullet Work in a field other than int. design/ int. architecture \ldots	. 0%
Undecided	. 0%
• Other	. 0%



DREXEL UNIVERSITY



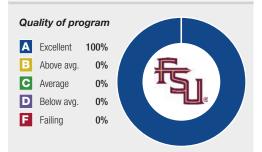
100% Believe they'll be well prepared for their profession upon graduation

What they'll do after graduation	(TOP 3)
Pursue an advanced degree in interior design	5%
Pursue an advanced degree in something other than interior design/interior architecture	0%
Work in a private practice	75%
Work for a corporation	5%
Work in academia	0%
Work in government	0%
Self-employment	0%
Volunteer or work for a non-profit or community service organization	0%
• Work in a field other than int. design/ int. architecture	0%
Undecided	10%
• Other	5%

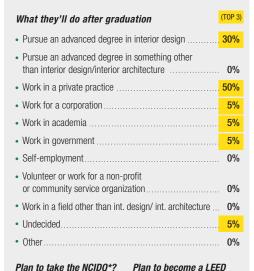
Plan to take the NCIDQ*? Plan to become a LEED accredited professional



FLORIDA STATE UNIVERSITY

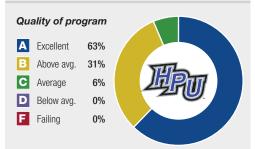


100% Believe they'll be well prepared for their profession upon graduation





HIGH POINT UNIVERSITY



87%

What they'll do after graduation

Believe they'll be well prepared for their profession upon graduation

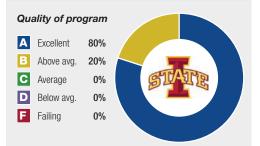
(TOP 3)

What they it do after graduation	
Pursue an advanced degree in interior design	6%
Pursue an advanced degree in something other than interior design/interior architecture	0%
Work in a private practice	50%
Work for a corporation	31%
Work in academia	0%
Work in government	0%
Self-employment	0%
Volunteer or work for a non-profit	
or community service organization	6%
\bullet Work in a field other than int. design/ int. architecture \dots	0%
Undecided	6%
Other	0%

Plan to take the NCIDQ*? Plan to become a LEED accredited professional



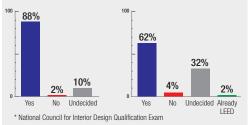
IOWA STATE UNIVERSITY



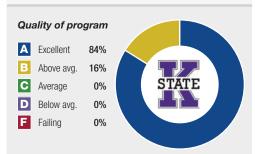
100% Believe they'll be well prepared for their profession upon graduation

What they'll do after graduation	(TOP 3)
Pursue an advanced degree in interior design	12%
Pursue an advanced degree in something other than interior design/interior architecture	2%
Work in a private practice	67%
Work for a corporation	8%
Work in academia	0%
Work in government	0%
Self-employment	8%
Volunteer or work for a non-profit or community service organization	0%
• Work in a field other than int. design/ int. architecture	0%
Undecided	2%
• Other	0%

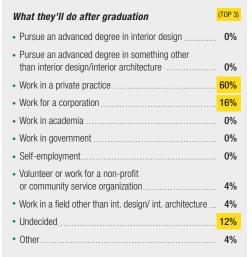
Plan to become a LEED Plan to take the NCIDQ*? accredited professional



KANSAS STATE UNIVERSITY



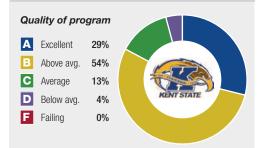
100% Believe they'll be well prepared for their profession upon graduation



Plan to take the NCIDQ*? Plan to become a LEED accredited professional

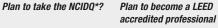


KENT STATE UNIVERSITY



Believe they'll be well prepared for their profession upon graduation







MARYVILLE UNIVERSITY Quality of program A Excellent 89% Above avg. 11% Average 0% Below avg. 0% Failing 0% Believe they'll be well prepared for their profession upon graduation (TOP 3) What they'll do after graduation · Pursue an advanced degree in something other than interior design/interior architecture 11% Work for a corporation 11% Work in government 0%

Plan to take the NCIDQ*? Plan to become a LEED accredited professional 100% 100 78% 22% 9 No Undecided Already LEED * National Council for Interior Design Qualification Exam

· Volunteer or work for a non-profit

NY SCHOOL OF INTERIOR DESIGN



98% Bell the

Believe they'll be well prepared for their profession upon graduation

What they'll do after graduation (TOP 3)
Pursue an advanced degree in interior design
Pursue an advanced degree in something other than interior design/interior architecture
Work in a private practice
Work for a corporation
Work in academia
• Work in government
• Self-employment
Volunteer or work for a non-profit or community service organization
\bullet Work in a field other than int. design/ int. architecture $$ $\!0\%$
• Undecided
• Other

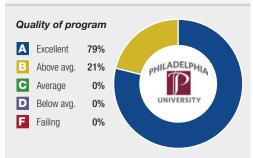


Plan to become a LEED

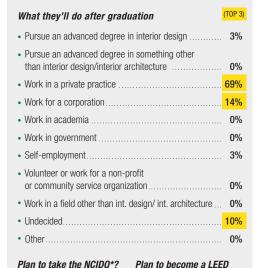
* National Council for Interior Design Qualification Exam

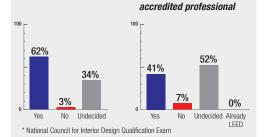
Plan to take the NCIDO*?

PHILADELPHIA UNIVERSITY

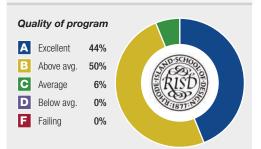


100% Believe they'll be well prepared for their profession upon graduation

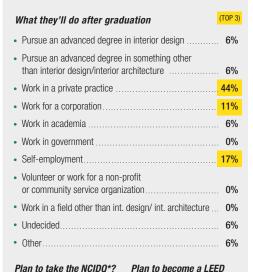




RISD



95% Believe they'll be well prepared for their profession upon graduation



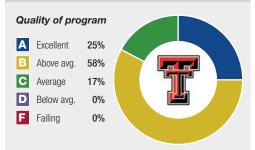


Nο

Undecided Already

Yes No Undecided Yes
* National Council for Interior Design Qualification Exam

TEXAS TECH UNIVERSITY



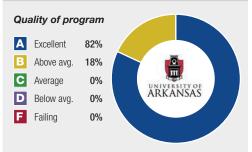
88% Believe they'll be well prepared for their profession upon graduation

What they'll do after graduation	(TOP 3)
Pursue an advanced degree in interior design	13%
Pursue an advanced degree in something other than interior design/interior architecture	4%
Work in a private practice	67%
Work for a corporation	13%
Work in academia	0%
Work in government	0%
Self-employment	0%
Volunteer or work for a non-profit or community service organization	0%
\bullet Work in a field other than int. design/ int. architecture \dots	0%
Undecided	4%
Other	0%

Plan to take the NCIDQ*? Plan to become a LEED accredited professional

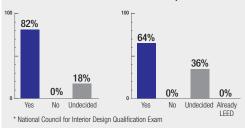


UNIVERSITY OF ARKANSAS

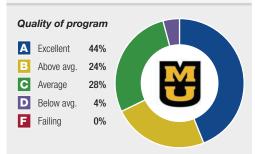


100% Believe they'll be well prepared for their profession upon graduation

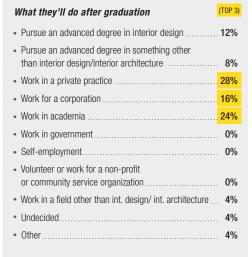




UNIVERSITY OF MISSOURI



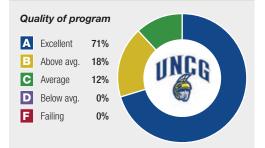
96% Believe they'll be well prepared for their profession upon graduation



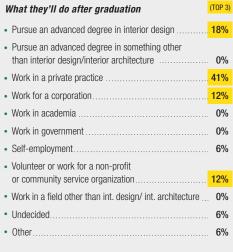
Plan to take the NCIDQ*? Plan to become a LEED accredited professional



UNC GREENSBORO

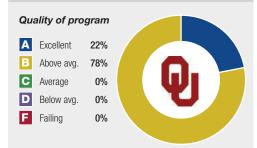


100% Believe they'll be well prepared for their profession upon graduation





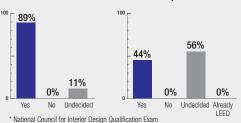
UNIVERSITY OF OKLAHOMA



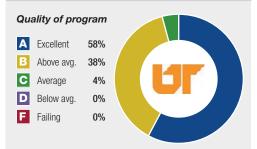
100% Believe they'll be well prepared for their profession upon graduation

What they'll do after graduation	(TOP 3)
Pursue an advanced degree in interior design	0%
Pursue an advanced degree in something other	
than interior design/interior architecture	11%
Work in a private practice	56%
Work for a corporation	33%
Work in academia	0%
Work in government	0%
Self-employment	0%
Volunteer or work for a non-profit	
or community service organization	0%
• Work in a field other than int. design/ int. architecture	0%
Undecided	0%
• Other	0%

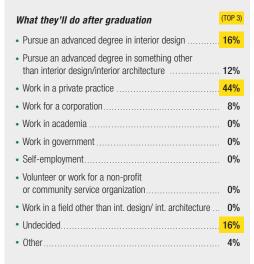
Plan to take the NCIDQ*? Plan to become a LEED accredited professional



U. OF TENNESSEE, KNOXVILLE



100% Believe they'll be well prepared for their profession upon graduation





Quality of program A Excellent 63% Above avg. 34% Average 2% Below avg. 0% Failing Believe they'll be well prepared for their profession upon graduation (TOP 3) What they'll do after graduation • Pursue an advanced degree in interior design · Pursue an advanced degree in something other than interior design/interior architecture 0% Work in academia 0% 0% 2% · Volunteer or work for a non-profit or community service organization..... Work in a field other than int, design/ int, architecture ... Undecided Plan to become a LEED Plan to take the NCIDO*? accredited professional 73%

22%

Yes No Undecided Yes

* National Council for Interior Design Qualification Exam

VIRGINIA TECH

DEBT LOAD

Upon graduation, interior design students anticipate an average debt load of:

\$32,211

DataPoint

DataPoint

SALARY

An interior designer with 0-4 years of experience can expect to earn approximately: *

\$45,244

Source: "2014 Compensation and Benefits Survey," DesignIntelligence, March/April 2014.
Does not include bonus, if any.

22%

5%

INDUSTRIAL DESIGN

"Design is intelligence made visible."

- ALINA WHEELER

INDUSTRIAL DESIGN

TOP 10 PROGRAMS 2015

In your firm's hiring experience in the past five years, which schools are best preparing students for success in the profession?

UNDERGRADUATE

- 1. University of Cincinnati
- 2. Art Center College of Design
- 3. Savannah College of Art and Design
- 4. Rhode Island School of Design
- 5. Carnegie Mellon University
- **5.** College for Creative Studies
- **7.** Georgia Institute of Technology
- 8. Auburn University
- 9. North Carolina State University
- 9. Ohio State University

GRADUATE

- 1. Rhode Island School of Design
- 2. Georgia Institute of Technology
- 2. Art Center College of Design
- 4. Carnegie Mellon University
- 4. North Carolina State University
- 4. Pratt Institute
- 7. Philadelphia University
- 7. Savannah College of Art and Design
- 9. Auburn University
- 9. Cranbrook Academy of Art
- **9.** University of Cincinnati

UDISTRIAL DESIGN

HISTORICAL RANKING OF LEADING PROGRAMS

UNDERGRADUATE

2015		2014	2013	2012	2011	2010	2009	2008	2007	2006
1	University of Cincinnati	1	1	1	2	4	3	2	2	2
2	Art Center College of Design	2	1	1	1	1	1	1	1	1
3	Savannah College of Art and Design	5	6			7				
4	Rhode Island School of Design	4	3	6	3	2	4	7	3	4
5	Carnegie Mellon University	9	9	3	4	4	2	7	4	6
5	College for Creative Studies	9	6		6	8	8	7	7	4
7	Georgia Institute of Technology				18	12	11			
8	Auburn University	6	6	9	10	10	7	5	6	
9	North Carolina State University	9			15	8	10		10	
9	Ohio State University			9	10	14	10	3		

GRADUATE

2015	i	2014	2013	2012	2011	2010	2009	2008	2007	2006
1	Rhode Island School of Design	7	2	7	5	3	2	3	8	6
2	Georgia Institute of Technology	3	7			8	4	3	9	10
2	Art Center College of Design	1	1	2	1	1	1	3	1	1
4	Carnegie Mellon University	3		9				10	6	
4	North Carolina State University				15	8	10		10	
4	Pratt Institute	3	2	7	7	5	3	3	7	2
7	Philadelphia University									
7	Savannah College of Art and Design	2	7			11		3	9	
9	Auburn University	3	4		7	7	11	6	10	3
9	Cranbrook Academy of Art	7	4	5	4	7	13	3		3
9	University of Cincinnati			2	5	5	8	3	3	

Note: Programs without numerical rankings scored below the top 10 or did not have an accredited program at that time.

REGIONAL RANKINGS

TOP SCHOOLS IN EACH GEOGRAPHIC REGION BASED ON ALL RESPONSES.

TOP INDUSTRIAL DESIGN SCHOOLS IN THE MIDWEST

UNDERGRADUATE

- 1. University of Cincinnati
- 2. College for Creative Studies
- 3. Ohio State University
- 4. Cleveland Institute of Art
- 5. Purdue University
- 5. University of Illinois at Chicago

GRADUATE

- 1. Cranbrook Academy of Art
- 1. University of Cincinnati
- 3. Ohio State University
- 4. College for Creative Studies
- 4. University of Illinois at Chicago

Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin

TOP INDUSTRIAL DESIGN SCHOOLS IN THE WEST

UNDERGRADUATE

- 1. Art Center College of Design
- 2. Arizona State University
- 3. Brigham Young University
- 3. California College of the Arts
- 5. Academy of Art University
- Western Washington University

GRADUATE

- 1. Art Center College of Design
- 2. California College of the Arts
- 3. Arizona State University
- 4. Academy of Art University
- 4. University of Washington

Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming

TOP INDUSTRIAL DESIGN SCHOOLS IN THE EAST

UNDERGRADUATE

- 1. Rhode Island School of Design
- 2. Carnegie Mellon University
- 3. Philadelphia University
- 3. Pratt Institute
- 5. Parsons the New School for Design

GRADUATE

- 1. Rhode Island School of Design
- 2. Carnegie Mellon University
- 2. Pratt Institute
- 4. Philadelphia University
- 5. Syracuse University

Connecticut, Delaware, D.C., Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont

TOP INDUSTRIAL DESIGN SCHOOLS IN THE SOUTH

UNDERGRADUATE

- 1. Savannah College of Art and Design
- 2. Georgia Institute of Technology
- 3. Auburn University
- 4. North Carolina State University
- 5. University of Houston

GRADUATE

- **1.** Georgia Institute of Technology
- 2. North Carolina State University
- 3. Savannah College of Art and Design
- 4. Auburn University

Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia

INDUSTRIAL DESIGN SKILLS ASSESSMENT

The collegiate programs that hiring firms deem strongest in educating for each skill area.



- 1. Art Center College of Design
- 1. University of Cincinnati
- 3. Auburn University
- 3. Georgia Institute of Technology
- 3. Savannah College of Art and Design



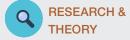
- 1. Art Center College of Design
- 2. Georgia Institute of Technology
- 3. Savannah College of Art and Design
- 3. University of Cincinnati
- 5. Auburn University



- 1. University of Cincinnati
- 2. Georgia Institute of Technology
- 2. Philadelphia University
- 4. Art Center College of Design
- 4. Carnegie Mellon University



- 1. Art Center College of Design
- 2. University of Cincinnati
- 3. Rhode Island School of Design
- 4. Georgia Institute of Technology
- 4. Pratt Institute
- 4. Savannah College of Art and Design
- 4. University of Houston

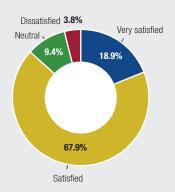


- 1. Georgia Institute of Technology
- 2. Savannah College of Art and Design
- 3. Carnegie Mellon University
- 3. Rhode Island School of Design
- 5. Art Center College of Design
- 5. Philadelphia University
- 5. University of Cincinnati

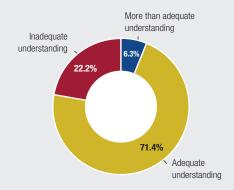


- 1. Savannah College of Art and Design
- 2. Art Center College of Design
- 2. Georgia Institute of Technology
- 2. Pratt Institute
- 2. Rhode Island School of Design

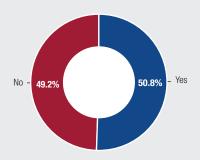
Rate your satisfaction with the state of industrial design education in the United States today.



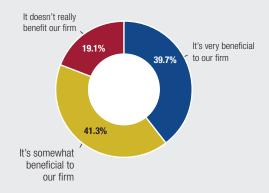
Are students graduating with an adequate understanding of material life cycles, recycling processes, design for disassembly, environmental impacts of materials and processes, and ecodesign principles?



Is your firm benefiting from an infusion of new ideas about sustainability from recent graduate new hires?



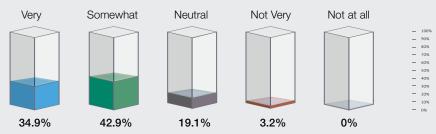
Is it beneficial to your firm when recent graduate new hires had study abroad experience while they were in school?



What is most important in a new graduate entering the workplace? (Multiple responses)

Their portfolio	79.0%
Their attitude/personality	64.5%
Work experience	16.1%
Where they went to school	6.5%
Where they're currently located	6.5%
GPA	1.6%

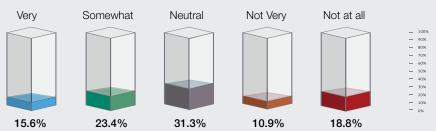
How important is it to your firm that a new graduate has previous work experience?



The design professions' biggest concerns (Multiple responses)

Speed of technological change	57.8%
Maintaining design quality	46.9%
Integrated design	43.8%
Globalization	32.8%
Sustainability/climate change	31.3%
Aging of the population	21.9%
Other	17.2%
Retaining quality staff in design practices	15.6%
Licensing issues	7.8 %
Safety/security	6.3%
Urbanization	3.1%

How important is it to your firm if a new graduate has graduated from a NASAD-accredited school?



INDUSTRIAL DESIGN DEANS SURVEY

The *DesignIntelligence* Survey of Industrial Design Deans and Department Heads collects the perspectives of 27 academic leaders weighing in on the status and progress of their own and peer programs.

Most admired undergraduate industrial design programs

1. University of Cincinnati 88888

For its great required co-op program and student work outcomes.

2. Philadelphia University 8888

For its well integrated program of design, engineering and business programs.

2. Rhode Island School of Design 8888

For its excellent resources and interdisciplinary curriculum.

2. Virginia Tech 8888

For its impressive student work and the quality of new graduates.

5. Arizona State University 8

For its progressive collaborative program within the industry.

5. Art Center College of Design 8

For its high quality student work and faculty.

5. Carnegie Mellon University 8

For its strong emphasis on technology.

5. Pratt Institute 8

For its solid international outlook in design.

Most admired graduate industrial design programs

1. Carnegie Mellon University 88888

For its emphasis on technology and innovative design research.

2. Cranbrook Academy of Art 🐰 🖔 🖔 🖔

For its strong conceptual program and high quality student output.

2. Illinois Institute of Technology 8888

For its innovative solutions and business focus.

4. Pratt Institute 88

For its design focus and opportunities for specialization.

4. Rhode Island School of Design 88

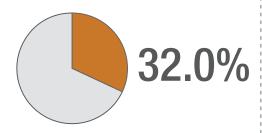
For its interdisciplinary curriculum and excellent resources.

INDUSTRIAL DESIGN

Average number of full-time faculty



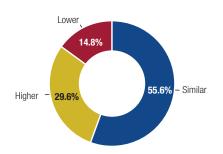
Average percentage of faculty who are adjunct professors:



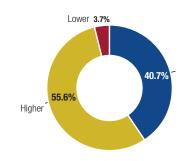
Average teaching load per academic year for full-time equivalent faculty:



Compared to 2014, deans expect their 2015 program budgets to be:



Compared to 2014, deans expect their 2015 student enrollments to be:



The most significant changes in course offerings in the past five years (Multiple responses,)
Mara amphasia an interdisciplinary callabaration and interreted practice	

	More emphasis on interdisciplinary collaboration and integrated practice	77.8%
	More technology integration	63.0%
	Upgrades in technology (hardware or software)	48.2%
	More emphasis on global issues/international practice	44.4%
	More integrative projects	37.0%
	More emphasis on professional practice	33.3%
	Study abroad opportunities	33.3%
	Other	29.6%
	Retention of quality teaching staff	25.9%
	More emphasis on sustainable design	18.5%
	More community engagement	14.8%
	More emphasis on urban design	3.7%
The design	n professions' biggest concerns (Multiple responses)	
	Sustainability/climate change	EO 00/
		59.3%
	Speed of technological change	
	Speed of technological change	51.9%
		51.9% 44.4%
	Aging of the population	51.9% 44.4% 44.4%
	Aging of the population	51.9% 44.4% 44.4% 44.4%
	Aging of the population	51.9% 44.4% 44.4% 44.4% 37.0%
	Aging of the population	51.9% 44.4% 44.4% 44.4% 37.0% 14.8%
	Aging of the population	51.9% 44.4% 44.4% 44.4% 37.0% 14.8%
	Aging of the population	51.9% 44.4% 44.4% 37.0% 14.8% 14.8%

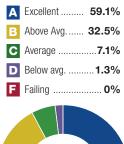
SAMPLING OF INDUSTRIAL DESIGN STUDENT SURVEYS

This year 360 students registered their opinions in the *DesignIntelligence* industrial design student survey. Here is what students said, both overall and by school. Only those NASAD-accredited schools with at least 10 survey participants are represented individually here.

RESPONDENTS

Undergraduate students	83.5%
Graduate students	12.9%
Other (including dual-degree and certificate) students	3.6%

How they grade the quality of their program overall $% \left(\mathbf{r}\right) =\left(\mathbf{r}\right)$



Believe they'll be well prepared for their profession upon graduation

Yes	94.4%
No	5.6%

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Yes	.15.4%
No	19.3%
Undecided	64.6%
Already LEED Al	P. 0.7 %

What they'll do after graduation

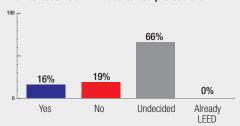
aduation	
Pursue an advanced degree in industrial design	
Pursue an advanced degree in something other than industrial design	
Work in private practice	2
Work in a corporation	4
Work in academia	
Work in government	
Self-employment	
Volunteer or work for a non-profit or community service organization	
Work in a field other than industrial design	
Undecided	
Other	

ARIZONA STATE UNIVERSITY Quality of program A Excellent 38% Above avg. 47% Average 16% UNIVERSITY Below avg. 0% Failing 0% Believe they'll be well prepared for 91%

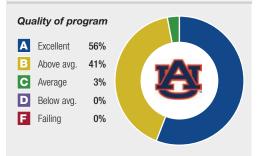
their profession upon graduation

(TOP 3) What they'll do after graduation Pursue an advanced degree in industrial design 6% · Pursue an advanced degree in something other than industrial design 0% Work in a private practice _________22% Work in academia 0% · Volunteer or work for a non-profit Work in a field other than industrial design...... • Undecided 13% • Other 9%

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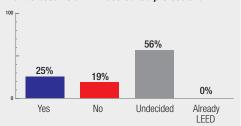
AUBURN UNIVERSITY



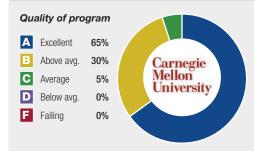
94%

Believe they'll be well prepared for their profession upon graduation

What they'll do after graduation	(TOP 3)
Pursue an advanced degree in industrial design	. 6%
Pursue an advanced degree in something other than industrial design	. 9%
Work in a private practice	13%
Work for a corporation	41%
Work in academia	3%
Work in government	. 6%
Self-employment	. 3%
Volunteer or work for a non-profit or community service organization	. 0%
Work in a field other than industrial design	. 3%
• Undecided	16%
Other	0%



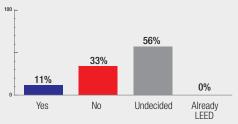
CARNEGIE MELON UNIVERSITY



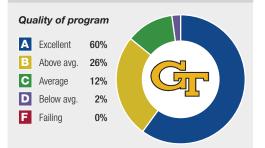
84% Believe they'll be well prepared for their profession upon graduation

What they'll do after graduation	(TOP 3)
Pursue an advanced degree in industrial design	5%
Pursue an advanced degree in something other than industrial design	. 0%
Work in a private practice	. 0%
Work for a corporation	37%
Work in academia	5%
Work in government	0%
Self-employment	5%
Volunteer or work for a non-profit or community service organization	. 0%
Work in a field other than industrial design	5%
Undecided	42%
• Other	. 0%

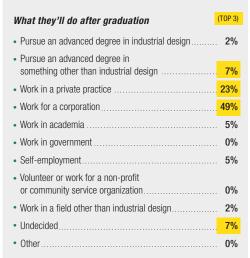
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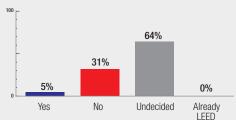


GEORGIA TECH

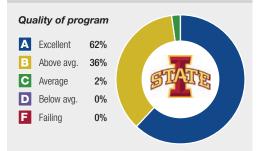


93% Believe they'll be well prepared for their profession upon graduation





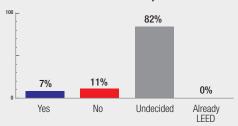
IOWA STATE UNIVERSITY



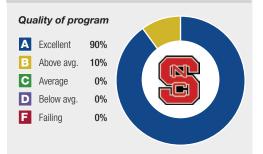
100% Believe they'll be well prepared for their profession upon graduation

What they'll do after graduation	(TOP 3)
Pursue an advanced degree in industrial design	13%
Pursue an advanced degree in something other than industrial design	2%
Work in a private practice	24%
Work for a corporation	47%
Work in academia	2%
Work in government	0%
Self-employment	2%
Volunteer or work for a non-profit or community service organization	2%
Work in a field other than industrial design	2%
Undecided	4%
• Other	0%

Plan to become a LEED accredited professional

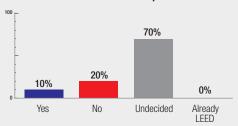


NORTH CAROLINA STATE U.



100% Believe they'll be well prepared for their profession upon graduation

What they'll do after graduation	(TOP 3)
Pursue an advanced degree in industrial design	10%
Pursue an advanced degree in something other than industrial design	0%
Work in a private practice	0%
Work for a corporation	70%
Work in academia	0%
Work in government	0%
Self-employment	0%
Volunteer or work for a non-profit or community service organization	0%
Work in a field other than industrial design	0%
Undecided	10%
• Other	10%

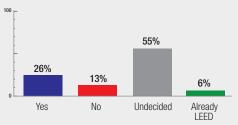


SCAD Quality of program A Excellent 61% Above avg. 29% SCAD 10% Average Below avg. 0% Failing 0%

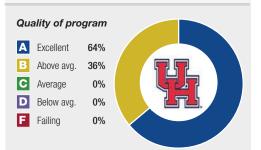
Believe they'll be well prepared for 97% their profession upon graduation

What they'll do after graduation · Pursue an advanced degree in something other than industrial design Work in academia Self-employment...... 0% · Volunteer or work for a non-profit 0% or community service organization..... Work in a field other than industrial design...... Undecided

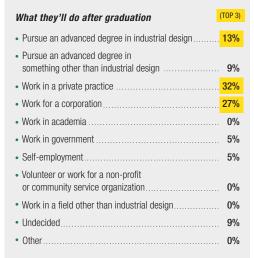
Plan to become a LEED accredited professional



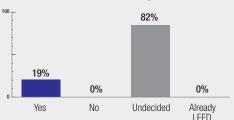
UNIVERSITY OF HOUSTON



Believe they'll be well prepared for 100% their profession upon graduation

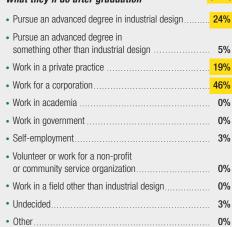


Plan to become a LEED accredited professional

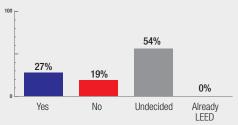


(TOP 3)

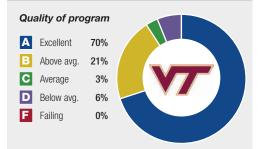
UNIVERSITY OF OREGON Quality of program A Excellent 49% Above avg. 38% 11% Average Below avg. 3% Failing 0% Believe they'll be well prepared for 94% their profession upon graduation (TOP 3) What they'll do after graduation Pursue an advanced degree in industrial design 24% • Pursue an advanced degree in



Plan to become a LEED accredited professional

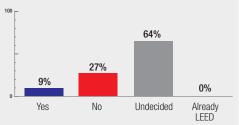


VIRGINIA TECH



94% Believe they'll be well prepared for their profession upon graduation

What they'll do after graduation	(IUP 3)
Pursue an advanced degree in industrial design	0%
Pursue an advanced degree in something other than industrial design	3%
Work in a private practice	27%
Work for a corporation	45%
Work in academia	0%
Work in government	0%
Self-employment	0%
Volunteer or work for a non-profit	
or community service organization	6%
Work in a field other than industrial design	3%
Undecided	12%
• Other	3%





The economy is improving, firms are preparing for new growth, and more options are opening for professional staff. As the talent wars heat up, are you sure that you are preparing your firm to attract and retain the right people?

Greenway Group has been studying issues of compensation in the design professions

since 1994. Our experience, perspective, and custom research can help you develop your compensation strategy with greater clarity and confidence.

To learn more about Greenway's compensation research, contact Principal Mary Pereboom at (678) 879-0940 or mpereboom@greenway.us.

Greenway Group

Foresight for the Business of Design

www.greenway.us 800.726.8603

Accreditation and Licensure Quick Reference Guide

The world of accreditation and professional licensure can be mysterious to aspiring designers who are choosing an educational path.

Accreditation is a process of review used to evaluate and ensure the quality of educational programs. Most often this review is conducted by private, nonprofit organizations that are dedicated to that purpose and there is usually a robust internal review component for the educational institution.

In many cases, attending an accredited program is an important step in attaining a professional license. Requirements for licensure in the profession generally limit unlicensed practitioners in what they can do or the title under which they practice. Consequently, it can be an important component in making a decision about enrolling in one educational program or another.

Each of the disciplines covered by America's Best Architecture & Design Schools 2015 differs in its approach to accreditation and licensure. Below is a quick reference guide to architecture, landscape architecture, interior design and industrial design.

ARCHITECTURE

- Accreditation offered for degree programs? YES
- Accrediting body: National Architectural Accrediting Board (NAAB)
- More information on accreditation is available through the NAAB website: www.naab.org
- Licensure required for practice: YES.
 Though it is possible to work in the profession without a professional license, U.S. state laws mandate that construction drawings be stamped or signed by a licensed architect.
- Other things it is important to know:
 Generally speaking, accredited architecture

- programs fall into one of two categories: accredited bachelor's programs and accredited 2- or 3-year master's programs. Many universities offer the "4-2" option of a four year, non-professional bachelor's program and a two-year accredited master's program.
- Examination: Architect Registration Examination (ARE)
- More information on licensure is available at the National Council of Architectural Registration Boards (NCARB) website: www.ncarb.org
- Associated organization: American Institute of Architects (AIA) www.aia.org

LANDSCAPE ARCHITECTURE

- Accreditation offered for degree programs?
 YES
- Accrediting body: Landscape Architectural Accreditation Board (LAAB)
- More information on accreditation is available through the LAAB section of the ASLA website:
 - www.asla.org/accreditationlaab.aspx
- Licensure required for practice: YES.
 According to the American Society of Landscape Architects, forty-nine states currently license or register landscape architects.
- Examination: Landscape Architect Registration Examination (LARE)
- Associated organization: American Society of Landscape Architects (ASLA) www.asla.org/index.aspx
- More information on licensure is available at the Council of Landscape Architectural Registration Boards (CLARB) website: www.clarb.org/Pages/default.aspx

INTERIOR DESIGN

- Accreditation offered for degree programs?
 YES
- Accrediting body: Council for Interior Design Accreditation (CIDA)

- More information on accreditation is available through the CIDA website: accredit-id.org
- Licensure required for practice: YES, in many states. Information about current licensing requirements is available through ASID, IIDA and state registration boards (see below).
- · Licensure exam: NCIDQ
- More information on the licensure exam is available through the Council for Interior Design Qualification: www.ncidqexam.org
- Associated organizations: American Society
 of Interior Designers (ASID) www.asid.org
 and International Interior Design Association
 (IIDA) www.iida.org

INDUSTRIAL DESIGN

- Accreditation offered for degree programs?
 YES
- Accrediting body: National Association of Schools of Art and Design (NASAD)
- Licensure required for practice: NO
- More information on accreditation is available through the NASAD website http://nasad.arts-accredit.org/
- Associated organization: Industrial Design Society of America (IDSA) http://idsa.org/

A Master of Architecture Online: LTU's Educational Experiment

In a digital world where many universities have developed Massive Open Online Courses (MOOCs) geared to widespread and open interactive learning, Lawrence Technological University's College of Architecture and Design has taken a different path.

-Glen LeRoy, FAIA, FAICP

n 2009, the college was one of the first in the United States to initiate an accredited online Master of Architecture degree (M. Arch.). It started as a bold educational experiment and had a distinct learning curve, as there were few similar programs to benchmark.

With the entrepreneurial spirit that characterizes our university and college, we forged ahead, inventing and refining new modes of curriculum delivery. In 2014, the program successfully passed its first review by a National Architectural Accrediting Board (NAAB) visiting team.

What are the dynamics that have led to LTU's successful launch of this professional curriculum? It is clear that the creation of an online, accredited architectural degree is not appropriate for every school of architecture. Success has come from the distinct orientation of this university, the culture of the College of Architecture and Design, and the support, commitment and creativity of its faculty.

This article profiles some of the considerations and thinking that informed the M.Arch. degree

online, as well as some of the concerns addressed and decisions made in developing the program.

SAME DEGREE, SAME PROGRAM, DIFFERENT MODE OF DELIVERY

The NAAB student performance criteria (SPCs) and their procedures for accreditation are rigorous. It is not really feasible for a school of architecture to develop one kind of program for its campus-based students and a totally different program for online students. We were fortunate at LTU, as we considered creating an online M. Arch. delivery, to have an existing program that was well-suited for the online marketplace.

Historically, our master of architecture degree evolved from an accredited 5-year bachelors' degree. Initially, the M. Arch. at the College consisted of a 4-year bachelor of science in architecture (B.S. Arch.), a pre-professional degree, followed by a 36 credit-hour accredited master's degree. Later, it evolved into a 5-year "direct entry" master's degree.

Our college, however, accepts applications from B.S. Arch graduates from other schools for our 36 credit-hour graduate program. Applicants are required to submit documents verifying not only that they meet all academic standards of the program, such as grade point average and creative work. They also must demonstrate that their pre-professional degree meets certain NAAB performance criteria through the submission of transcripts, undergraduate course materials, and a design portfolio.

This rigorous admissions process, common to both online and on-campus students, allowed us to create a program that fulfills all NAAB accreditation requirements. The program also provides flexibility for our students, who freely tailor their studies to meet personal interests. The M. Arch. is a very efficient program, which many students can complete in one calendar year, plus one summer. Over the last few years, we have found this to be an ideal timetable for an online master's degree program. Two or three year programs operate at a distinct disadvantage for most online students, as it is regarded as too time consuming.

MAINTAINING AN ONLINE "STUDIO CULTURE"

nlike many online M. Arch. degree programs in the United States, we conduct our primary masters-level design studios online. Other programs typically conduct intensive on-campus concentrated summer design studios. The design studio online is one of the most problematic and least cost effective areas

of program delivery. Yet, in our minds, it has become an essential component of a truly online master's program.

The critical question is how to teach a design studio, the most traditionally interpersonal portion of an architectural curriculum, in a "virtual" format. The answer goes back to our roots as a "technological university." Technological integration does not merely refer to building systems at our school. It is a comprehensive approach that applies to digital hardware and software, production methods, and the delivery of academic programs.

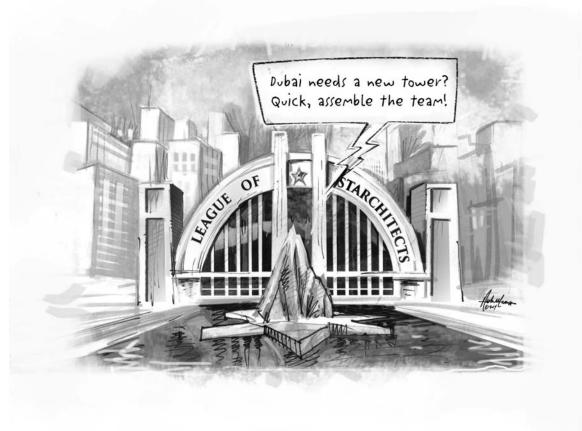
We experimented with several different approaches to teach design studios. Ultimately, we settled on a system that placed the professor and all students in the same virtual studio environment at the same time. They can conduct free-flowing pin-ups and reviews, telestrate concepts, and see the expressions of all studio participants. There is a significant trade-off, however. Interactions are a bit slower in the virtual environment, so maintaining a highly communicative studio culture has necessitated a much smaller class size for online studios. There are also significant financial implications for the university and college in pursuing this approach.

SYNCHRONOUS VS. ASYNCHRONOUS ENVIRONMENTS

There is a growing body of literature regarding the effectiveness of synchronous versus asynchronous e-learning. Asynchro-

nous delivery often utilizes pre-recorded lectures, supplemented by video, chat rooms, and e-mails. It is not time dependent, thus it is convenient for online students to attend classes at a time that fits their schedule. Synchronous delivery occurs in real time, like the design studio described above. Class sessions occur at a prescribed time and, they are similar to on-campus courses in that respect. Students often consider this delivery mode more "social" and less frustrating than asynchronous classes, because questions are answered live and immediately.

The challenge for a delivering a complete online degree program is to balance the convenience offered in the asynchronous e-learning environment with the vibrancy and immediacy of the synchronous environment. We are currently developing methods to integrate the best of both environments into course offerings, experimenting with creative overlaps of synchronous and asynchronous tactics. We have created new approaches, including an "immediate asynchronous concept," with synchronous course components integrated into the asynchronous environment.



THE INTERPLAY OF ONLINE AND ON-CAMPUS DELIVERY

ur online program has become popular for students across the United States and internationally. An unintended consequence is that it has also become popular for our own students entering their fifth year, creating opportunities for them to pursue full-time employment in the profession while completing their degree. Additionally, individual online courses and studios are growing in demand for our on-campus students for a variety of reasons. As a result, many students pursue a hybrid approach to their master's degree consisting of coursework on-campus and online.

In our minds, this interplay of online and oncampus education is desirable, because it creates an inter-mixed community of students representing both remote and campus-based constituencies. It also presents a challenge for maintaining the culture of the college and the critical balance between these two delivery modes.

ONLINE EDUCATION EMULATES PRACTICE

ontemporary architectural practice has become more global, more technologically integrated, and it possesses more team-based complexity. Digital communications and virtual office environments have become commonplace in the 21st Century. In many ways, the online educational environment emulates the communications and practice modalities of evolving professional practice.

At Lawrence Technological University, we are committed to technology, professional education, entrepreneurial spirit, and a global reach. An online M. Arch. program fits perfectly into our educational model and philosophy, just as online communications are a mainstay of practice.

A master of architecture online is not for everyone. This is true for both schools of architecture and architectural students alike. Many students thrive in the "high touch," and personal environment afforded by a traditional college campus, and many schools are most comfortable with a traditional delivery style. An increasing number of students, however, find the "high tech," virtual environment of online education most appropriate to meet their educational goals or their unique locational or career circumstances.



Glen LeRoy, FAIA, FAICP, is an architect and urban planner, who serves as Dean of the College of Architecture and Design at Lawrence Technological University in Southfield, Michigan. Scott Shall, AIA, contributed to this article. He serves as Chair of the Department of Architecture at LTU.

School's Out. Now What?

There's nothing quite like a graduation ceremony. The work has been done, the exams graded, and the air is full of pride and promise as the next generation is unleashed upon an unsuspecting world.

—Scott Simpson

or the newly minted graduates, their long years of study have finally paid off. This is their moment to embrace the future and to imagine, almost without limit, what they will be able to accomplish during the course of their careers. There's a good reason that graduation is called "commencement". It may be the end of one chapter, but it is just the beginning of another. The smartest graduates will realize just how much they still have to learn. In a surprisingly short time, the GPAs, the awards won, and even which school they attended will fade into relative insignificance. School is merely the rehearsal, not the performance. What really matters is what comes next.

In Hollywood, it's said that you can never be too rich or too thin. The same notion applies to education — you can never get enough. The real goal is not to accumulate facts, but to forge a lifelong habit of learning how to learn. This is particularly true in the A/E/C industry, which is undergoing profound changes. Traditional building types are being transformed even as new ones are being invented. Technology has ignited a burst of creativity, enabling designers to explore new forms and structures that were not previously in the playbook. Process innovation, both in terms of documentation and delivery, is making it possible to execute projects with a

much higher degree of precision and predictability. Big data is making us smarter about how buildings can adapt to the changing needs of the occupants. New materials are being invented that are highly sustainable, energy efficient, and recyclable. Building codes are constantly being updated. An emerging appreciation of the total cost of ownership over the lifespan of a building is changing the way decisions get made and reformulating the basic value proposition of design. In other words, no matter how well we've learned how to play the game so far, the rules keep changing.

This phenomenon is not confined to the A/E/C industry. Advances in just about any field (medicine, manufacturing, finance, information technology, and even agriculture) are just as profound and far-reaching. We live in a turbulent world which is continually being jostled by the emergence of new ideas, technologies, processes, and expectations. The more things change, the more we expect them to keep changing. What passes for "expertise" today has a rapidly diminishing shelf life, so if we don't stay current, we risk getting stale in a hurry, regardless of where we are in our respective careers.

This creates a lot of pressure keep up. It's simply not possible to read all the books in the library or at-

tend every conference. If we waited until we knew everything we need to know, nothing would ever get done. However, it is possible to adopt strategies for filtering signal from noise and for developing a knowledge network that will keep us abreast of the most important new ideas and trends. This is where lifelong learning comes in.

The only thing that is certain is that the future is unknowable. As our careers unfold, the need for information will change. For those just starting out, the first step is to realize just how much remains to be learned. It's simply not possible to absorb all the basics in a few short years of schooling, which is why the Intern Development Program was devised. In the formative stages, the focus should be on acquiring the additional fundamental knowledge and experiences that are necessary to become fully licensed. This process is not perfect, but it does have the benefit of providing some structure, and the exams force emerging professionals to focus on the critical aspects of practice. They may never again need to size a duct or calculate a beam, but it is important to understand the basic underlying principles. It's very telling that for the majority, it takes as much time to navigate the IPD process as it does to get through school.

While the rigors of licensing are being navigated, young professionals can actually start doing useful work. The A/E/C industry is extremely diverse, so it takes time to sort through the options. It's not unlike medicine, where the question is not so much "Do you want to become a doctor?" but rather "What kind of doctor do you want to become?" There is a natural tendency to

gravitate toward areas of personal interest, but circumstance also plays a huge role. It helps to get exposed to the widest possible range of experiences. Like climbing a tree, the higher you go, the farther you can see.

Then there is another graduation of sorts, a natural inflection point when the focus begins to narrow and deepen. For some, design will be the primary driver. For others, it could be technical documentation, project management, or perhaps business development. It's very rare for one person to possess all these different skill sets in equal measure, which is why at this point in a typical career, specialization begins to take root.

The trend toward specialization underscores both the value and the necessity of collaborating with others. It takes many different skills to design, document, and deliver a project, which puts a premium on teamwork. The cleverest ones figure this out early, and they consciously seek to develop their communication skills. True leadership requires a mix of confidence and humility. Leaders must inspire a sense of authority and respect even as they seek to empower their subordinates to achieve extraordinary results. It's a delicate balance, not easily achieved or sustained. Leadership is generally not taught in school, but it can be learned.

Eventually, leaders are called to perform the most difficult task of all, which is turning over the reins to others. Times keep changing, no one lives forever, and what may have worked brilliantly in the past is has become outdated. Leaders constantly mentor others, because that

is the surest (and only) way to safeguard the long term health of the organization. The wisest among them will not seek to replicate their past successes or promote their clones; they will seek out others who will be able to handle the unexpected challenges and changes that are sure to come their way.

Each stage of professional development has its own unique aspects, but all of them share one basic characteristic, which is the need for continuous learning. It helps to have a plan. Here are a few tips:

Strengthen your core knowledge: Strive for continuous improvement in your chosen specialty. Aim to achieve "expert" status in at least one area of professional practice.

Follow your ignorance: Choose an area you know nothing about, then do some reading or attend a conference. Continuous exposure to new ideas helps keep the mind nimble.

Be a mentor: Helping others learn is a great way to strengthen your own knowledge base. It invites us re-examine and re-evaluate what we think we know

Become a mentee: Younger members of the firm bring new ideas, attitudes and skills. Find out what. You will be surprised by how much you can learn from them.

Seek criticism: Make a presentation, write an article, or start a blog and ask for feedback. It's amazing what you discover when you invite others challenge your assumptions.

Create your own knowledge network:

Clients, consultants, and contractors all have different ideas about what works. Create and nurture your own brain trust.

Get away: Travel is a great way to break your regular routine and become exposed to new places, faces, and foods. It forces us to see things differently.

Unplug: Make it a regular habit to get to the theater, symphony, or a museum several times a year. Or just take long walks. No cell phones, Google, or e-mail. This is fertilizer for the mind.

We live in a world where credentials carry a great deal of weight. Degrees, certifications, and CEUs are all a necessary part of professional practice. However, they should not be an end in themselves. Mere access to information doesn't make us smart; these days, anyone can Google anything in a matter of seconds. What really counts is creative problem solving and an ability to think critically about a wide range of issues. This requires adopting a strategy of lifelong learning. It's a bit like river rafting: you can let the current carry you along, but to get to where you really want to go, it's up to you to do the paddling.



Scott Simpson is a senior fellow of the Design Futures Council and a member of its executive board. He is a Richard Upjohn Fellow of the American Institute of Architects. With James P. Cramer, he co-authored the books How Firms Succeed and The Next Architect.

Charting a Path for a Career in Architecture

An interview with Yale graduate student, Michael Miller.

1. How did you first determine that you wanted to study architecture?

Since I was quite young, my favorite activities involved building, in every form of play that I could find. My afternoons were filled with the construction and destruction of massive empires in blocks, LEGO, K'Nex, mud, really anything around me. I often think that the academic and professional work I do now has many parallels to this patient and methodical play. My parents and family friends suggested that I should pursue architecture. I took the few courses that my high school offered in basic drafting and design. The first time I drew a straight pencil line on a drafting board, I was astonished at its beauty. I had the opportunity to enter a design competition; I did well, reinforcing my personal interest in architecture and suggesting some potential talent.

2. What factors did you look at in selecting an undergraduate school?

Despite my leanings towards architecture, I still was unsure whether it would be a major and a career. My main criterion was programmatic flexibility. If the architecture program didn't fit, I wanted to be able to switch to an alternative path like engineering. Thus the quality and opportunities that the school overall had to offer was more important to me than the specifics of the architecture program alone. Other important factors that solidified my decision to attend were its beautiful campus, mid-sized city setting, and in-state scholarship program. Evaluat-

ing the return on my investment is a key factor when choosing a school, major and potential profession because an architect's rewards are not usually monetary.

3. How did you determine the list of graduate schools you wanted to apply to?

I drew up a matrix which listed schools with their strengths and weaknesses. Then I talked to professors and friends. I progressively pruned the list.

4. What criteria did you use to evaluate each school and compare it to the others?

The first matrix categories were general facts: program length, location, program size, application requirements, tuition and the like. Though quite general, these categories are important. Length affects cost. Location predicts your likely region of residence. Schools tends to draw professors locally and the students often take jobs at firms in the region. Yale draws most of its faculty in practice from New York City and through those relationships, many students work there afterwards. The program size is a big factor as well because it determines the feel of the school and the type of relationships that you will likely make with your classmates.

More complex criteria concerned the culture and philosophy of the schools. The four main resources that I used to determine the institution's culture were the dean's letter, the required course/studio focus, the elective options, thesis versus non-thesis programs, and the interests of the professors that taught there. I recommend reading the dean's letter closely and noting its main points. These points create interesting contrasts within a comparative matrix. The elective options indicate the variety of interests that the school has to offer. Research the writings of your potential mentors. Though time consuming, a careful comparative assessment goes beyond the more shallow criteria of ranking and celebrity faculty and allows a deeper understanding of the schools.

5. Why did you ultimately choose Yale?

When I was writing the personal statement portion of the different applications, it became clear that Yale was my first choice because of the genuine ease with which I was able to articulate my intentions for applying. I had very clear ideas about my interests and how the school's philosophy and trajectory would help me foster my academic and professional goals. It's the school that felt right and ultimately, with so many unknowns, that unquantifiable feeling may be your best compass.

6. How does the reality of Yale compare to your expectations?

Yale's been even better than expected. No matter how deeply you research the program and attempt to understand an institution from the outside, you can't really know a place until you're in it. Personally Yale's pushed me to explore aspects of myself as a designer that I never knew I had by exposing me to the depth, complexity, and variety within the discipline. I hoped for and

discovered a friendly social culture, in the studio and at the famous cocktail hours. Additionally Yale's network has afforded me opportunities that I never expected through its alumni network and friendships with other graduate colleges.

7. What do you know now that you wish you had in mind when you were looking at schools (undergraduate or graduate)?

I wish I had a better understanding of the different undergraduate degree options. Make sure to determine whether a Bachelor's, Bachelor's of Arts, or Bachelor's of Science is best for your goals. I thought that my Bachelor's of Science in Architecture would give me advanced placement into a two year program for graduate school. While this is true for some graduate schools, it's not true for all of them.

8. If you had one piece of advice for someone applying to an architecture undergraduate program, what would it be?

Choose a school where you can gain a rich general education. Architecture overlaps with so many other fields that a diverse undergraduate education can bring more interesting architecture later. Also many people don't end up liking architecture school, so give yourself a back-up plan.

9. If you had one piece of advice for someone applying to an architecture graduate program, what would it be?

Do your research and trust your gut.



On Becoming the New CEO in an Established and Esteemed Company

Transitioning a firm to a new organizational leader ranks as a most vital event. Many of our clients have successfully navigated these events but not without dedicating a lot of time to gaining alignment, planning, and implementing change.

—Lisa Henry

ow it is our turn. In September I took over the helm as CEO of Greenway Group. Jim Cramer and I began a serious discussion about assuming the chief leadership role at Greenway a year ago. We had many conversations about this in the course of our work together. We met often at our offices in Atlanta. We met in Chicago and Washington, D.C., in La Jolla and Copenhagen, and talked a lot on the phone. We are fortunate to travel in our work and to leverage the new perspectives of being in different places.

Early on we discovered that we share many values and beliefs: a fundamental belief in the value of the work of design professionals who shape the world and solve complex problems; a belief that Greenway's work is that of servant leaders to our clients which can help propel their performance and generate improved business results; a belief that multiple disciplines and a community of voices that includes educators, students, association leaders, researchers, product manufacturers, as well practitioners add dimension to our network and viewpoint.

Our commonalities don't stop there, and yet I found myself obsessing about our differences.

How can a new leader come into an established 20 year-old enterprise which has thrived under one beloved leader and expect to be accepted and serve as a new visionary for the next phase of the company? Am I the only one who had this concern? After consulting with several leaders I have worked with over many years, I learned that the honest answer is no, I am not alone. They shared a few ideas that have really helped me see these concerns in a realistic light. Here are the insights that helped me and I think can be useful to others stepping into the role of CEO in a business led so well for so long by its founder:

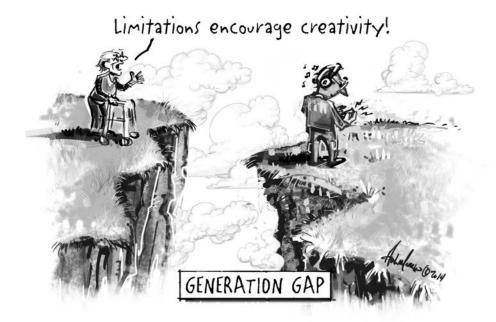
Go with your strengths and acknowledge your heritage. Greenway's heritage is that of consulting with clients who have businesses or practices within the broad realm of architecture and design. That's our historical strength and we will creatively expand our expertise to support businesses in these professions and industries. Jim has created a valuable link to firms who help us "see the future" through our research. We will continue our research, expand its scope and share it with our clients and partners. The Design Futures Council emerged from this thinking and is the legacy envisioned by Jim

and the late Dr. Jonas Salk, which we will continue to build upon.

If you want to change anything major you have to do it with other people. Listen. Learn. Teach. Lead. It begins with an idea — a point of view — and will create an ascendancy in the company.

Supect disruption and manage change. Our staff knows the pace and rhythms of the business and are accustomed to doing things a certain way, naturally. One leader reminded me of the past work we did for a client while I was the director in our design studio. We helped them envision the future and introduce a big workspace change, moving from a traditional office planning model

to a more collaborative, non-dedicated open workspace model. It was a big shift for them and required that we design and implement an extensive change management process. A new leader coming on board has to expect to implement similar change management strategies too; staff has to expect that internal roles may change, growth will be part of that, and new priorities and rhythms will be established. We'll need to minimize the impact and duration of the "disruption". One way is to ask "if we were starting from scratch how would we do this?" Any organizational change is not executed in a vacuum; it takes planning and participation of the people affected. The good news is that we are intimately familiar with change management processes and can use our skills to accomplish this well in our own house.



Ask what legacy you intend to leave on the business. Having only recently taken on this new role, a piece of advice from Lynn Utter, president at Knoll, took me by surprise: She said that identifying at the outset how you hope to be remembered, you have to set goals and keep your eye on the big picture even when day-to-day activities can become all consuming. And there is no one right answer: lots of leaders with varying leadership styles leave important marks on their organizations. The trick is to know what is most needed and valued in your organization, and defining the leadership principles by which you intend to deliver enduring results.

Jim has added his point of view about approaching business and leadership at Greenway. He told me work is a way of life. He told me he wasn't in this business for personal economic gain but that compensation was the means by which he created opportunities for others to achieve their dreams. He told me to get comfortable with ambiguity; you can push so far but answers often need to emerge in their own time. He told me that he worked for his passion and unwavering belief in the power of the architecture and design; that embedded in the well-designed built environment is the highest expression of human achievement.

Imagine having all of this great insight to call upon!

As we grow into the next chapter of our history I intend to take this guidance to heart as I launch our plan. I have learned a lot about leadership transition through study and experience par-

ticularly, that if everything is a priority, then nothing is a priority. It sound cliché but we do it to ourselves all the time. When there seems to be 50 'critical' things to do and we pare the list down to 20, we are still swamped. Doesn't that sound familiar?

The best directions are simple directions. Focus. When things get overly complicated, it is easy to get lost — and to lose others. When organizations are provided with a clear and simple roadmap, they can move with purpose and focus, leaving room for individual imagination and experience to fill in the details.

I have also learned that during transitions, moving quickly to communicate a few big themes quenches an organization's thirst for a sense of what a new order might entail. This helps free people to respond positively to our new direction. It also provides an overall context so that people can come to grips with everything that is going on; it provides a beacon of stability in a sea of change.

I look forward to sharing our evolution, direction, and growth with our community of partners and clients in the months (and years) ahead.



Lisa Henry is the CEO of Greenway Group. She leads the Executive team at Greenway Group and Greenway Communications, publisher of DesignIntelligence.

Research as Core Curriculum in Architecture and Planning

Integration of teaching and research is fertile ground for new knowledge and creative practice.

-Robert G. Shibley

he implications of an increasingly urbanized world have thrust the design professions into provocative arenas of influence. Now more than ever, design is being pursued as a powerful means to address issues as sweeping as climate change and public health. At the same time, today's clients and stakeholders demand buildings and environments that are at once beautiful, high-performing and responsible.

Success in this context requires the rapid generation of new knowledge and new modes of practice. In response, firms large and small have formed R&D divisions and shifted their missions to drive design solutions with research and experimental practice. Emerging as centers of innovation, firms are independently generating sustainable, high-performance materials, advanced building technologies and an evidence base for design across the practices. These ways of working also foster professional resiliency in a time of great uncertainty.

Such a paradigm shift begs the question, how can the academy better prepare architects and planners for this practice environment while applying university resources to advance shared inquiry? Certainly it requires stronger connections between the profession and academy, but also new approaches to the education and training of the aspiring design professional.

The Buffalo School of Architecture and Planning (Buffalo School) in the University at Buffalo has comprehensively embraced this imperative and taken it to the core of its curriculum. It does this in the context of a flagship campus of The State University of New York — one of thirty-four public research universities in the prestigious Association of American Universities. The Buffalo School curriculum draws on the pedagogical premise that research and creative practice are not just platforms but the basis for design education. More broadly, the academy is more focused than ever on the application of knowledge in ways that engage industry and serve the local and global community. Finally, this enterprise is catalyzed by the view that architecture and planning — the two departments of the Buffalo School — are natural allies in research and that an increasingly hybridized design profession demands engagement across the disciplines.

For our students, this culture of inquiry inculcates reflective practice and enterprise and paves a more seamless transition into the profession. For the practice realm, it creates deep inlets into the academy and forums for in situ research,

particularly via our regional context in Buffalo. Ultimately, such an enterprise is an engine for new knowledge, innovative practices and exploratory research for application across organizations, communities and the professions.

The Buffalo School research enterprise is organized around six core fields that align with the pressing design issues of our time and emergent knowledge needs in the professions (Figure 1). These range from situated technologies and the intersection of architecture, new media and computational technologies, to environmental systems and sustainability,

to the complex relationships across the built environment and public health. Around each is a set of curricular vehicles that bring research into the studio and seminar. Four research groups — inclusive design, situated technologies, material culture and ecological practices — form the basis of the professional Master of Architecture program and two specialization options for the post-professional Master of Science in Architecture. Faculty members align with a particular group to create a collaborative, cross-fertilizing cluster for research. Students participate in one or more research groups throughout the

Figure 1:*

Research Enterprise Places Buffalo School at the Top of the Nation's Public Universities in Annual Research

A ranking of public schools of architecture and planning within the Association of American Universities, by annual research generated

- 1. University of Florida, College of Design, Construction & Planning
- 2. Georgia Institute of Technology, College of Architecture
- 3. University at Buffalo, School of Architecture and Planning
- 4. University of California, Los Angeles, Architecture & Urban Design
- 5. University of California, Berkeley, College of Environmental Design
- 6. University of Oregon, School of Architecture and Allied Arts
- 7. University of Washington (Seattle), College of Built Environments
- 8. University of Michigan, Taubman College of Architecture + Urban Planning
- 9. University of Minnesota, Twin Cities, College of Design
- 10. University of Arizona, College of Architecture + Planning + Landscape Architecture
- 11. The Ohio State University, Knowlton School of Architecture
- 12. University of Maryland, College Park, School of Architecture, Planning and Preservation
- 13. University of Virginia, School of Architecture
- 14. University of Kansas, School of Architecture, Design & Planning

Master of Architecture program and advance exploratory and applied research through sponsored studios and directed research. From a proposal that gained the University at Buffalo entry in the U.S. Department of Energy Solar Decathlon to experimentation with thin-gauge metals with local industry, many of the Buffalo School's practice-based researches originate from these groups.

Five design-related research centers reinforce the curriculum as conduits for large, often multiyear sponsored research programs. Two of these

Ranking is based on most recently available data on annual research expenditures by all public schools of architecture and planning within the American Association of Universities. Among the 60 universities within the AAU, there are 34 public universities, 18 of which house accredited architecture and planning programs within one school. Note that research data were not aggregated or publically available for the following programs: University of Texas at Austin, School of Architecture; University of Illinois at Urbana-Champaign, School of Architecture; lowa State University, College of Design; Texas A&M University, College Station, College of Architecture.

Figure 2: Outputs of the Buffalo School Research Enterprise

BEST PRACTICES AND EVIDENCE-BASED DESIGN

Universal Design Standards

Since its formation in 1978, the Center for Inclusive Design and Environmental Access has generated seminal research and widely adopted standards in accessible and universal design to create environments and products that are more usable, safer and healthier for all. The IDeA Center has directed over 30 sponsored research projects, including the national Rehabilitation Engineering Research Center on Universal Design.

▶ New Research on Public Health and the Built Environment

A new transdisciplinary research initiative with urban and regional planning, the IDeA Center and the University at Buffalo's school of public health will explore the complex connections between the built environment, health behavior and health outcomes. The group will launch a dual degree in planning and public health.

▶ Urban Design in Economic and Sustainable Development Planning

The Urban Design Project's collaboration with the City of Buffalo and its citizens over the past three decades is today guiding the region's urban-focused renaissance. Now aligned with the UB Regional Institute, the center is guiding place-based economic development for Western New York and leading a HUD-funded regional sustainable development plan. The work has been recognized nationally by the International Economic Development Council, the American Planning Association, the Congress of New Urbanism, and the American Institute of Architects as best practice models in their annual professional awards programs.

ENTREPRENEURIAL PRACTICES

▶ Digital Craft in Terra Cotta Manufacturing

An evolution of the school's situated technologies research, Boston Valley Terra Cotta, a Buffalo-based company that manufactures and restores architectural terra cotta for projects around the world, has just deployed a suite of digital design and fabrication tools to gain production efficiencies and enhanced craft. The ongoing research partnership has faculty and students embedded with the firm, working on the factory floor with mold-makers, draftspeople and sculptors to test and implement the new tools. The work is now being exhibited and published to advance architectural applications in ceramics.

Structural Applications for Thin-Gauge Steel

The head of Rigidized Metals, a manufacturer of deep-textured steel, was eager to find new applications for his materials. Buffalo School faculty members and students in material culture and situated technologies were interested in testing the design and structural possibilities of thin-gauge metals. Two years later, a self-supporting wall composed of 152 folded panels of textured steel stands as testament to the potential of that collaboration. The work has won several international competitions for fabrication and materials innovation and has evolved with support from global engineering firm Zahner. Meanwhile, the Buffalo School's in situ R&D with Rigidized Metals has upskilled its workforce and advanced the company into new architectural commissions.

SPECULATIVE RESEARCH

Building Materials and Technology

Two architecture faculty members at the Buffalo School are working with global architectural firms to develop their research. A proposal for a prefabricated unit for urban apartment remodels, the grand prize winner of the 2013 Hyundai Engineering & Construction Technology Forum, is being targeted by one of the nation's largest architectural firms for its potential to reduce construction time. Another faculty member has taken exploratory research with a regional manufacturer to a top architectural firm. The work will apply a fiber-placement robot in the design and development of trusses for large-scale public buildings.

GROW Home:

A design concept developed by an Ecological Practices studio has earned UB a spot in the U.S. Department of Energy's Solar Decathlon, an international collegiate competition to design and build net-zero energy, solar-powered home. Architecture students and faculty are now collaborating across seven departments at UB as well as with a local solar panel manufacturer and construction firm to realize their design. To be permanently sited in Buffalo as an educational resource, the GROW Home will push the limits of active and passive solar design for climates like Buffalo.

centers — the Center for Inclusive Design for Environmental Access (IDeA Center) and the Center for Architecture and Situated Technology — directly link with a curricular research group. Such an infrastructure organizes faculty and students around targeted inquiry, leverages sponsorship through the academy and cultivates broad research networks and industry connections. As an example, the Buffalo School's internationally regarded IDeA Center has directed over 30 primarily federally-sponsored research projects, including the national Rehabilitation Engineering Research Center on Universal Design.

As designers confront complex and fluid global issues, collaboration across the disciplines is no longer a choice. The Buffalo School approaches design in relation to its socioeconomic, environmental, cultural and technological contexts as a matter of course. Research integration in architecture and planning has fostered promising new research relating the built environment to health, food systems and sustainability and the generation of best practices in urban design for legacy cities. Much of this work is channeled through the school's research centers and linked to teaching through the dual Master of Architecture/Master of Urban and Regional Planning.

The Buffalo School also links across the University at Buffalo in each of its research fields. Mechanical engineers advance the study of robotics in architecture, biologists root ecological design in data, and rehabilitation scientists inform design for accessible environments. The Buffalo School also allies with the university's strategic strengths and areas of invest-

ment, including UB RENEW (Research and Education in eNergy, Environment and Water), public health and the health sciences, and information and computing technology. Dual architecture degrees with fine arts, media arts and business administration further buttress this interdisciplinary research infrastructure.

A research-based curriculum also opens the program to intensive engagement with professional practice and our regional context in Buffalo. Often this leads to more tactile and hands-on research through building and making and an embedded presence within industry and practice. Consider that students competing in the Solar Decathlon will design and build a net-zero energy, solar-powered home entirely through the studio and seminar course offerings. An M. Arch. thesis placed a student on the factory floor of Boston Valley Terra Cotta to design a digital tool for terra cotta cutting (he's now overseeing the company's digital design lab as a full-time employee). An urban design studio worked with the UB Regional Institute, community groups and NYS Department of Transportation to design decking and economic impact alternatives for Buffalo's Kensington Expressway the former site of an Olmsted-designed parkway.

Such practice-based research collaborations are fueled by Buffalo's status as a transitioning region ripe for design intervention. A legacy city in the midst of an economic restructuring, the region is riding a wave of reinvestment focused on its urban core, waterfront and neighborhoods. Yet the region also presents extreme cases of urban challenges — population decline and its attendant issues of vacancy and sprawl,

Figure 3: Research as a Way of Teaching in Architecture and Planning



The Buffalo School integrates design research into its core curriculum, aligns the study of architecture with planning and partners across the disciplines of a major public research university.

RESEARCH FIELD	Situated Technologies	Universal Design	Sustainability and Ecology	Material Culture	Community Development	Health and the Built Environment
CURRICULAR INTEGRATION	MArch with Situated Technologies Research Group MS Arch, specialization in Situated Technologies	MArch with Inclusive Design Research Group MS Arch, specialization in Inclusive Design	MArch with Ecological Practices Research Group	MArch with Material Culture Research Group	MS Arch, specialization in Urban Design and Historic Preservation	MArch with Inclusive Design Research Group MS Arch, specialization in Inclusive Design
	MArch/MUP					
RESEARCH CENTER COLLABORATIONS	Center for Architecture and Situated Technologies	Center for Inclusive Design and Environmental Access	UB Regional Institute Food Systems Planning and Healthy Communities Lab	Center for Architecture and Situated Technologies	UB Regional Institute Center for Urban Studies Center for Inclusive Design and Environmental Access Food Systems Planning and Healthy Communities Lab	Center for Inclusive Design and Environmental Access Food Systems Planning and Healthy Communities Lab UB Regional Institute
INTERDISCIPLINARY CONNECTIONS ACROSS THE UNIVERSITY AT BUFFALO	Information and Computing Technology	Public Health, Health Sciences, Rehabilitation Sciences, Occupational Therapy	UB RENEW (Research and Education in eNergy, Environment and Water) Biological Sciences	Mechanical Engineering and Aeronautics	Education, Social Work, Law	Public Health, Health Sciences
	Engineering					
	Fine Arts, Media Arts MArch/MFA, MS Arch + MS in Media Architecture					
	Business Administration MArch/MBA					

economic disparity and post-industrial environmental legacies, to name a few. Faced with such provocative challenges and opportunities, government, community and industry alike are embracing a spirit of entrepreneurism and openness to experimentation. Often they are equal instigators and co-investigators in design research with the Buffalo School. Together, these conditions supply the physical, cultural and organizational spaces to provoke, test and implement design and planning solutions with relevance far beyond Buffalo's borders.

The Buffalo School's research enterprise and its pervasive community and industry engagement combine into a powerful leveraging of academic and professional networks and resources to transfer innovation for the broadest possible application (Figure 2). Best practices in universal design, widely cited urban design standards and innovative approaches to sustainability planning and place-based economic development drive evidence-based design in the professions. On-the-ground engagement with industry and firms catalyzes entrepreneurial practices in digital fabrication for architectural manufacturing, material innovations in structural steel and transformative designs (and builds) for a city in the midst of significant revitalization. Speculative researches incubated in the studio and research groups maintain the role of the academy to push the periphery of knowledge even as they advance to next-stage research with support from major firms and industries.

Perhaps most importantly, the pursuit of research as a way of teaching and learning prepares future architects and planners to approach practice reflectively and research as an essential way of working. The school's critical practice within Buffalo's built, natural, social and cultural landscape cultivates core skills for today's rapidly changing profession — entrepreneurial and design activist sensibilities, collaborative agility, leadership and client relations, and facility with building technology and full-scale construction.

Meanwhile, the Buffalo School has recently emerged as a top-performer among the nation's public schools of architecture and planning in the Association of American Universities as measured by annual research (Figure 3). Major sponsors include the National Institute of Disability and Rehabilitation Research, the U.S. Department of Housing and Urban Development and the U.S. Department of Agriculture.

As we look into this uncertain future, the American Institute of Architects has placed the need to forge greater linkages between the academy and practice at the top of its research agenda. Even as firms invest in their own research enterprises, they will continue to depend upon the academy for its research capacity and freedom to sit at the fringe of current practices. The Buffalo School's view of design education and research as one in the same directly responds to these concerns and empowers the professions of architecture and planning as global agents of change.



Robert G. Shibley is Professor and Dean, School of Architecture and Planning at University of Buffalo., The State University of New York.

Lyceum Fellowship: A 30-year Journey

Spring of 1978; as a University of Cincinnati Cooperative Work Study student, I worked at Symmes, Maini & McKee in Cambridge, Massachusetts. Lucky for me, SMMA was very busy and they moved my desk into Principal Jon McKee's personal office; he became a mentor in architecture and life.

—Mark A. Hutker, FAIA

A MENTOR WITH A VISION

ittle did I know at the time that Jon had a long history of mentoring young architects through travel opportunities around the world. He had a passion and habit of opening eager eyes to the cultural values imbued in architecture through experience. Two such opportunities were extended to me, traveling to Southeast Asia and Europe. To this day, those trips influence the way I think about space making and creating architecture with a deep connection to place.

In 1985, McKee conceived a legacy fellowship to offer independent travel anywhere in the world to undergraduate students of architecture. It was important that student travel be experienced prior to completion of their academic career, so that it would influence their focus in final years. The Lyceum Fellowship concept was born, named after Aristotle's Peripatetic teaching method. McKee invited Peter Vincent, FAIA; Steve Arens, AIA; Joseph Sziabowski, AIA; Jennifer Sweet; Mark Spaulding, AIA, and me to join him in shaping the fellowship as a board of directors.

The Lyceum Fellowship was established with the mission of advancing the profession of architecture by engaging students in design and travel. Through a unique structure of design competition, jury process, and prizewinning travel grants, the Lyceum promotes collaboration, connectivity, and a design dialogue among schools, their students of architecture and the prominent architects who serve as program authors and jurors.

For nearly 30 years, the fellowship has awarded over \$423,000 in prize money to 84 students, of which 56 have travelled to over 58 countries worldwide, representing 250 months (20 + years) of total travel. In addition, more than 100 students have been recognized with merit or citation awards.

In 2010, on the occasion of the 25th anniversary of the Lyceum Fellowship, The Boston Society of Architects bestowed upon Jon McKee a Medal of Honor for his vision, benevolence, mentoring, and advancement of the profession of architecture. The Lyceum Fellowship, Inc. is a non-profit corporation and the board serves its mission pro bono.

"Traveling: it leaves you speechless,then turns you into a storyteller."

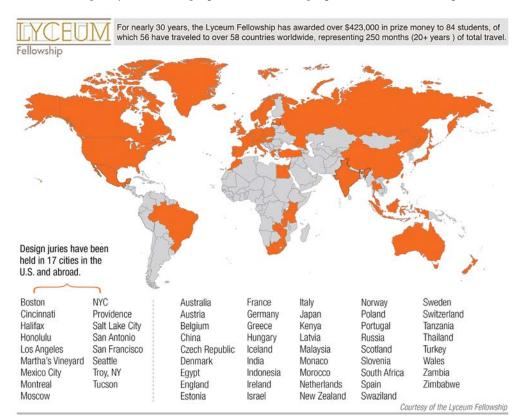
Justin Chapman, 1st Place, 2012

THE BEGINNING

The first fellowship program, "Creating a Contemporary Lyceum," was hosted at Rensselaer Polytechnic University, with Robert Campbell, FAIA serving as jury chair. Interestingly, this was the only program written in-house. We quickly learned that program au-

thorship was an attractive opportunity for nationally recognized architects. These authorsat-large have created a theoretical basis for each year's competition, which in turn engages each school's faculty and students.

The initial juries were comprised of the program author, one of the Lyceum Directors on a rotating basis, and five invited jurors from participating schools. It has always been important to the ethos of the Lyceum that each student learn, not only by designing a solution to the program brief, but also through feedback



GROWING UP WITH THE LYCEUM

-Harly Hutker

y experience with the Lyceum Fellowship, a design competition awarding architecture students travel grants, is very unique. I am not a board member, though I have been involved with the fellowship my entire life. I am not a juror, though I have seen many entries. I have never entered a competition, though I am an architecture student. And I have never won the competition, but have traveled a lot along with the Lyceum.

John McKee founded the Lyceum Fellowship in 1985 and invited my father Mark Hutker as co-founder, along with two other young architects who also started their professional architecture careers at Symmes, Manni, McKee. The group of board members, having grown now to five members, and their families meet every year for the competition. We have also celebrated New Years together for many years at Jon's harbor-front apartment; perfect for fireworks.

The Lyceum is an annual event in our family akin to Christmas or Thanksgiving. We have traditions, eat great food, travel, and are always in great company. But what sets me apart from my brother and the few other kids who grew up within the Lyceum family is that I am now an architecture student, and my decision was largely influenced

regarding the jury debate themes and key attributes of the winning solutions. This was facilitated by the faculty jury members who reported back to their students.

As the Lyceum has grown, the juries have come to include international architects, critics, editors, and educators who complement the theme of the program. Today, five-member juries review student entries in a city near the location of the program author or the project site. Jury locations have provided opportunities for the members of the board, our families, and the participating jurors to enjoy broadening personal and professional networks while experiencing amazing travel to locations such as Boston, Cincinnati, Halifax, Honolulu, Los Angeles, Martha's Vineyard, Mexico City, Montreal, Moscow, New York City, Providence, Salt Lake City, Seattle, San Francisco, and Tucson.

Outreach and communication have always been an important part of the dialogue. The "Lyceum Retrospective Exhibition" was held at Boston Architectural College in 1988 and subsequently traveled to participating schools to mark the first three years, with a *Retrospective* booklet including commentaries published in the following year. Today, winning student entries are featured on the Lyceum website along with jury comments and video links as an added learning opportunity for all participants and the public. Featured articles have appeared in Metropolis, Dwell, Print, Boston Globe and the BSA Newsletter.

COLLABORATION AND MENTORSHIP

Three AIA Gold Medalists have served as program authors: Peter Bohlin, FAIA; Charles Moore, FAIA; and Samuel Mockbee, FAIA. Charles Renfro, AIA; Michael Rotondi, FAIA; Marlon Blackwell, FAIA; and 23 others have also written program statements concerning the most important aspects of architectural thinking over the past three decades. Competing students have been the beneficiaries of the competition experience with preeminent architects, and are cast across the country.

Schools of architecture have included Boston Architectural College; The Cooper Union; McGill University; Miami University (Ohio); Moscow Institute of Technology; North Carolina State University; Rensselaer Polytechnic Institute; Southern California Institute of Architecture; University of Arkansas; University of Arizona; University of Cincinnati; University of Miami; University of Nebraska, Lincoln; University of Oregon; and Woodbury University. For many schools, participation in the Lyceum provides opportunities that would not otherwise be funded. In 1991, the jury was held at the Moscow Institute of Technology, just as the former USSR was emerging from communist rule and opened the door to travel opportunities for students that had been formerly prohibited.

"The Lyceum provides a very necessary forum of ideas and discussion for schools that do not have an overabundance of those kinds of opportunities."

Daniel Perruzzi, AIA, Juror, 1987

by the fellowship. The Lyceum program is an important addition to my architectural, professional and social education, teaching me how broad architectural thinking can be; the value in mentorship, and the importance of travel.

After working for Symmes, Maini, McKee, my father founded an architecture firm on Cape Cod that designs custom residences. They are beautiful, multi-generational homes that are actively embedded in the New England vernacular, each family's narrative, and the natural environment. In my formative years, I thought architecture was only the homes my father built or skyscrapers in Boston. But the 2005 Lyceum program, written by Venice Beach's Jennifer Siegal, entitled "Smart Materials: Wearable Architecture," revolutionized my notion of what could be considered architecture.

Through her program, I learned that architecture is not static, but can be portable, malleable and modular. Wide-eyed, looking through the entries as a twelve year old, I thought these images were really exotic. They were not gable roofed elevations but showed figures inhabiting a pliable façade like a hammock or wearing a hip belt that turned into an underwater pod. The ideas generated in this program were flexible and adaptable to all architectural thought, but, to me, they showed that the minds that can design homes and libraries could also imagine these far-out ideas seemingly fit only

for extra-terrestrial life. I think that without this wide view of architecture, I may have shied away from architecture school, afraid that I'd be limited to designing monopoly pieces. My mom says, "Architecture is the best liberal arts education you can get!" So, unsure of what I wanted to pursue in college, I decided architecture school would be a good way to start, thinking that, even if I didn't like it, it would exercise my imagination and develop good work habits and presentation skills. Architectural thought, after all, could apply to lots of fields — fashion, engineering, or photography.

After learning all that architecture could include from the Lyceum program itself, I learned from the jurors and board members that architecture is an apprentice profession with a tradition of "paying it forward." Jon McKee took a personal interest the professional growth of each one of the board members, providing insight and experiences.

The board members all see the value in mentorship, and now want to give students with aptitude equally significant opportunities. Jurors also see the competition as a way to help architects grow. I witnessed program author Peter Bohlin review every student's entry — reading each project statement completely, respecting the ideas and hard work, and looking for gems of genius in the pile of submissions.

Traveling is at the core of the Fellowship's mission, which, until starting my architec-

The competition format has also fostered collegial interchange among faculty members across the United States, Canada and Russia. Schools create Lyceum studios within their curriculum. These classes are in the highest demand and faculty lobby to teach them. Schools celebrate the fact that their students have placed in the competition, contributing to a strident opportunity for each school's recognition, and recruitment efforts. More than 3,000 students have advanced their education by participating in the Lyceum studio offered at their school. More than 350 Lyceum studios have been taught by faculty who have exchanged ideas and critiqued projects, focused on timely issues facing architects each year.

Parallel to the competition is the formative collaboration with award-winning graphic designer Nancy Skolos and photographer Tom Wedell for commissioned announcement posters. The 29 posters to-date, designed to the theme of each program statement, represent the evolution of the graphic design concepts of these two artists over three decades in tandem with the evolving architectural concepts — an added dimension of the Lyceum program through the documentation and communication of timely and relevant design ideas. Skolos-Wedell have lectured globally about their process of design and the posters have been exhibited widely and acquired for permanent museum collections. Skolos-Wedell also created the award-winning Lyceum brand identity and design of its website www.lyceum-fellowship.org.

TRAVEL

The fellowship prizes are generous and meaningful. The grants allow the first place winning student to travel anywhere in the world for four months, second place travels for two months and one month travel is offered for third prize. Students are required to prepare a preliminary itinerary of travel at the time of project submission. Juries consider the travel goals and aspirations of the students as part of project submissions. Often the intent of travel is significant enough to break a tie.

In situ and upon return from their travels, each student submits ongoing and final reports to the Lyceum about lessons learned and inspirations. Student blogs, photography, and journal entries are posted on the Lyceum website. Student sketches depict the immediacy, nuance, and importance of learning about architecture through direct experience, a legacy of the Lyceum that is instrumental to the development and education of young talent and next generation leaders.

"It was an important and formative time for me and something I absolutely could not have done without the Lyceum Fellowship grant." Murray Legge, FAIA 2013, 1st Place, 1988

Alumni/ae are contributing in a myriad of ways to the architecture profession in firms, institutions and endeavors across the U.S. and

ture schooling, I saw as a "reward" rather than an integral part of an education. I recognized the significant value in the mission when the likes of Tom Kundig, Susan Sznazy and Craig Dykers stepped in and juried, volunteering their time and valuable expertise. I think the goals of the Fellowship strike a chord among prominent architects and provide a mechanism to give back to the profession and future generations.

For me, study abroad provided the most real-life educational experience thus far. This past spring I studied in Berlin, which was a fantastic place to visit because there is a lot of new construction in general, and these new buildings address important issues about sustainability, society, scale, history, and heritage. My teachers were able to send me directly to precedents, and I was able to walk down any street and be inspired. I think all designers — professionals and teachers — see the value in experiencing the built environment first-hand.

I have also learned a lot from the Lyceum entries themselves, impressed by the graphic content, outside the box thinking, and travel goals. I remember one specific entry from 2013 that was all about revitalizing the abandoned stair infrastructure in Cincinnati, Ohio. It was a response to the program writer's "call to action," a challenge for students to identify their own design problem in their community. The student argued it could be a huge recre-

ational circulation system that would reconnect the city's stratified cultural fabric.

The project was well developed and looked beautiful, but the most lasting impression the project had on me was when the student said that, if awarded travel money, he would research different cultures' use of stairs. I love the idea of focusing on one specific problem, in this case, connecting different levels of terrain, and comparing cultures through their solutions. Inspired, I decided to focus on bricks while I was in Berlin — brick patterns, pavers, screens, even the brick proportions themselves. I don't quite know what it all means yet, but I really like looking at a city through a lens and collecting data.

While I've acquired all these different ways of thinking about architecture, I also admire the people involved in the Lyceum Fellowship. Everyone involved is united under the mission to provide really meaningful feedback and opportunity. The program started under Jon, the unassuming patriarch during juries, travels and New Years dinners. Following his example, the Lyceum Fellowship legacy he created brings people together to learn from each other, and sends them out into the world to experience something new.

Harly Hutker is a fourth year architecture student in the co-operative work study program of Northeastern University. In 2013, she studied photography in Havana, Cuba and in 2014, studied architecture in Berlin, Germany. She has contributed to the November/December 2013 issue of Design Intelligence, and continues to grow with the Lyceum.

around the world. The respected architects, writers, and educators that participate as program authors and jury members are part of the Lyceum's extraordinary network of over 150 professionals connected in design dialogue, education, and mentorship.

Winner of the first Lyceum competition, Joseph Krupczynski, is now Associate Professor, Department of Architecture, at the University of Massachusetts Amherst. Murray Legge, FAIA, winner in 1988, was just elevated to the AIA College of Fellows. 1991 winner Sergei Sitar from Moscow travelled to the U.S. and stayed with Jon McKee's colleagues across the country. In southern California, through introduction to Michael Rotondi, FAIA, Sergei was offered a full ride single-term scholarship to SCI-Arc. He was able to return to Russia with enough money left over to publish the very first architectural journal in that country. Frank Gartner, the 1988 merit recipient, founded the studio Vertu in Chicago in 1993; Charles Stone, 1990 1st place winner, is an Associate at Herzog & de Meuron in New York; Pietro Ganaiola, 1st place in 1992, is Principal at Lewis & Ganaiola in Swansea, UK; Casey Shenton Hughes, 1st place winner in 2002, is now Principal at Casey Hughes Architects, Los Angeles; and Joel Davenport, 2003 recipient, is now Associate architect in the London firm of Allies & Morrison Architects.

WHAT'S NEXT?

Thirty years from commencement, the Lyceum Fellowship is in positive transition in two major ways. First, an amazing gift from patron founder Jon McKee has endowed the Lyceum into the future. Our goal is to administrate the annual competition and award travel grants in perpetuity. Second, in spring of 2013 the Lyceum board conducted a two day strategic planning session inviting 'outside voices' to assist in visioning the next three decades. We are currently deploying the action plan. Major aspects of this plan include:

- Reach out to each past participating school of architecture for their input with faculty and student experience.
- Cultivate the Lyceum into the premier architectural travel grant program in the country.
- Beginning in 2015, open the competition to all schools of architecture in North America and Canada, and actively call for new participation.
- · Steward and grow the endowment.
- Develop and deploy an efficient and userfriendly administrative process supporting all Lyceum responsibilities.
- · Diversify and grow the board of directors.
- Seek 'partnerships' with strong leaders, schools of architecture, institutions and firms

in the industry that share values of advancing the profession of architecture.

The Lyceum's influence is broad and deep, yet over the years it has been a rather quiet and discrete enterprise. This is mostly attributed to the modesty of the patron founder and the interest on the part of the Fellowship in the artistic, intellectual, and personal development of the individual winners. Marking three decades, the Lyceum is coming to the forefront. Each board member, in different ways, has been deeply touched by our involvement in the Lyceum and we remain deeply committed to its future. With a focused positive transition and dedicated board members, the Lyceum Fellowship continues to influence and mentor next generation talents and further advance the profession. The next 30-year journey is only just beginning.

"Thank you for all you are doing for our future architects and for architecture."

Richard Wesley, Head, Department of Architecture
University of Pennsylvania



Mark A. Hutker, FAIA, is founder of Hutker Architects of Martha's Vinyard and Falmouth, MA; recognized for residential architecture in a new regional vernacular. Dedicated to design education, Mark is a long-standing director and cofounder of the Lyceum Fellowship, which advances the profession of architecture by engaging students in design and travel.

Impacts of Doctoral Education on the Profession

After Although Ph.D. degrees in architectural history and theory have existed for some time, non-history doctoral programs in architecture only began to proliferate about 50 years ago.

—Douglas Noble, FAIA, Ph.D.

he founding of doctoral programs in architecture at a handful of universities commencing in the early-1960's brought about public debates about degree content, structure, curricula, and program purpose. Only about a dozen schools offered doctoral education in the early 1960's (led by University of Pennsylvania, Princeton, Carnegie Mellon, Berkeley, Harvard and Michigan) and a survey thirty years later still found only 15 programs. Suddenly, however, at the end of the 20th century the number of North American universities granting a Ph.D. in Architecture nearly tripled.

A PhDiA survey in 2008 found approximately 600 doctoral students enrolled at that time in more than 40 programs. Responses from universities in 2011 answering the same questions indicated that there were more than 700 students. The exact count is difficult because there are hybrid programs and interdisciplinary students that are difficult to classify. There

are new types of doctoral degrees, and many more subject areas being explored. Ph.D.-granting programs can now be found in about one-quarter of the architecture schools in the United States, covering academic disciplines including technology, computing, design theory, culture, design, architectural history, and media as well as the social sciences of architecture such as environment-behavior studies. The initial impacts of the growth primarily affected schools. More recently, the doctorate is finding its way into the profession.

The first waves of graduates from this expansion fueled the growth of the doctorate as a valued degree among the tenure-track faculty at leading universities. The Ph.D. has quickly become widely accepted as a valued credential for full-time faculty at major universities. New avenues for research funding are reinforcing the value of scientific research in academia and in the profession. More students from the United States are joining programs that have historically been

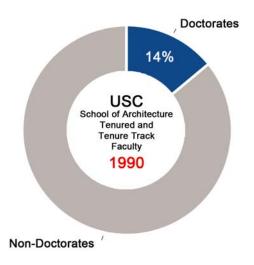
¹ PhDiA is a research group based at the University of Southern California that investigates doctoral education in architecture and related fields. PhDiA has just under 2000 members representing faculty, alumni and students holding architecture doctorates.

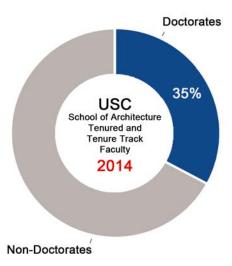
dominated by international students. Examination of university faculty position advertisements in the ACSA News (Association of Collegiate School Schools of Architecture) showed a significant spike in the number of listings that specifically indicated that the Ph.D. was a recommended credential for tenure-track applicants. While complete data has not been available, our comparative studies of recent faculty lists to those from the late 20th century through today show a doubling and often tripling of the percentage of tenured and tenure-track faculty holding the doctorate.

At first glance, it might appear that the graduation rates of newly minted Ph.D.s is not be supported by the number of new tenure-track fac-

ulty positions opening each year in the United States. However, well over half of the enrolled students in doctoral programs in North America hail from other countries, and many return to their home countries to accept faculty positions. More importantly, many new Ph.D.s are not aiming for academic careers. Significant numbers are heading for the professions.

It is not surprising that technology-oriented graduates are swelling the ranks of architectural engineering firms worldwide. Incoming doctoral students often indicate a preference for finding careers in these firms rather than in a traditional academic research setting. Star architectural engineering firms like Arup and Buro Happold are attracted to technology-





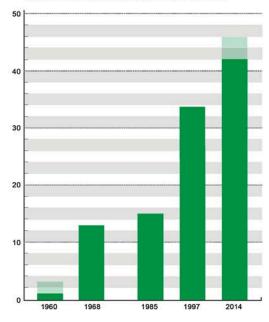
Design Research Programs Inside Architecture Firms

Although there have been attempts to track graduates of doctoral programs, the sources and data are not yet robust enough to be able to draw detailed conclusions. Changes in the hiring data for new tenure-track faculty show a clear upswing in the percentage holding a doctorate, but not all graduates are headed for academic careers. The PhDiA organization maintains a list of almost 2000 people who have obtained a doctorate (or are working towards one) in architecture, and most of these entries include a current affiliation. By far the largest affiliation group is at universities, but this probably reflects the relative ease of finding Ph.D. students and faculty versus finding alumni working in the professions or governments. Academics have a much higher likelihood of finding and joining PhDiA. We do know that there are significant number of doctoral-degree holders who are working in the professions.

We have found graduates working in the profession in many of the traditional career titles that professional degree holders have. There are doctoral degree holders working in design, construction documents, firm leadership, and construction administration. We have also found that there are graduates working in more specialized careers related to research and oriented architecture doctorates who can effectively respond to architect clients.

The revelation about graduates is not that some seek academic careers and others want to join consulting firms, but that many are seeking and finding careers directly in architecture firms. These graduates are supplying applied and speculative research opportunities that firms are using for competitive advantage for supporting and seeking technologically challenging projects.

HISTORICAL PERSPECTIVE
Total number of non-history doctoral degree programs
housed in architecture schools in North America



Architectural design is a research-oriented activity, and all architects conduct at least some research for their projects. Larger firms that can afford the overhead and the specialized staff have been conducting deep research well before the growth of the doctoral programs.

The worldwide growth of the expanded-service AEC firm, combined with the increasing size of the largest architecture firms in the United States, has provided firms of such a large scale that they can effectively establish and operate internal research and development (R&D) organizations. Some firms manage these R&D programs as departments, while others formalize alternative corporate structures. When R&D efforts in an architecture firm generate substantial new expertise and capabilities, separate structure and branding and can expand the scope of services the firm can offer, such as the case with Gehry Technologies.



Doug Noble is currently Chair of the Ph.D. program in Architecture at the University of Southern California and is a co-founder of the "NotLY" (Not Licensed Yet) program, as well as PHDiA, as association for doctoral students in architecture

development, and we have seen larger firms with specialized research programs working in both on project-based and program development. Firms are using graduates especially in the areas of computing (such as BIM) and in analytical work (such as energy and sustainable design). Many graduates with specialized knowledge find careers in consulting, but we are seeing more and more AEC firms with in-house expertise in such roles as architectural acoustics, lighting/daylighting and building envelope design.

There are instances of firms developing deep capabilities in this type of applied research, resulting in spin-off and semi-independent subsidiary organizations such as Gehry Technologies.

With large-firm consolidation and deepening expertise, we expect to see significant growth in the number and type of research programs developing within the professional firm corporate structure. These programs inside architecture firms can help slow the erosion of the breadth of architectural practice as technology increases the need for specialized knowledge. The dramatic growth in the number of doctoral programs, and the number of enrolled students, will provide knowledgeable candidates for these R&D positions.

Tenets of the 21st Century Designer

Critical Skills Designers of all Types Will Need in the Future

-Wayne Li

Amidst great change, design behaviors can lead the way for a new creative pedagogy

STARTING OUT

e've all seen great upheaval in the modern workplace. The disruptive power of social media, off-shoring, the loss of U.S. manufacturing capability, and the rise of BRIC emerging markets are all testaments to the need for constant innovation and re-invention of business practices in order to address an increasingly complex world.

Amidst these large changes and challenging times, how educators prepare students to be creative professionals, as well as technical and scientific ones, needs to be re-examined. Disciplinary knowledge is becoming a digitized commodity. I don't need legal representation, I can buy a will or file a patent on legalzoom.com; I don't need a doctor, I can consult webmd.com; I don't need an engineer, my contract manufacturer in China has it baked into the manufacturing contract. Educators need to ask not only what knowledge they are giving to their students, but also what wisdom they will impart on how to best apply their "just-in-time" internet-delivered education.

The more we cling to notions of obsolete, "traditional" design practice, the more students will be pigeonholed into a concrete way of thinking that will stymie their potential. However, there are trans-disciplinary mindsets that can help "impart wisdom" rather than transfer rote knowledge. These tenets — Design Behaviors — can change how we structure our curriculum and engage design students. To help illustrate these behaviors, I'd like to share with you a few anecdotes from my career in consulting, corporate design practice, and academia. Using these critical skills, along with deep disciplinary knowledge, design professionals can change how they create, relate, and endure.

CROSS LINKING

y undergraduate experience was a trial by fire. Starting out in a dual degree honors program in liberal arts & engineering, I parlayed the credits into Fine Arts–Design and Mechanical Engineering degrees. This meant shifting from a usual bachelors of science in engineering, approximately 130 credits, to well over 210 credit hours in a five year BFA/BS program. It was an *especially* busy time, and yet also one of the most creative times of my life.

Creativity can be defined by free association — connecting or combining disparate inspirations often in interesting ways. Drucker's *Innovation and Entrepreneurship* would define one of the sources of innovation as a change in perception, where a differing viewpoint flips the way a market is addressed. Christensen's *Innovator's DNA* considers "associating" one of the five key "discovery" skills that distinguish innovators.

The underlying premise to free association and changes in perception is a great **empathy** and respect for another viewpoint or discipline.

By combining the two disciplines across colleges, I combined two different ways of thinking (inductive/divergent vs. deductive/convergent) and began making connections between the two fields. I could use the crystalline structure of a steel alloy as an inspiration for a grid system for a graphic design. I could use the art college's sculpture shop to craft and refine airfoils for my fluid dynamics classes. From these experiences, the ability to create objects in order to test my understanding gave me a visceral, intuitive sense of the engineering science; it was so much richer than learning from textbooks and equations alone. Conversely, the discipline and analytical skills of engineering encouraged in my design work a rigor that was both critical and reflective.

I also learned how hard it is to modify policies in a rigid bureaucracy that is highly optimized around graduating students through set channels. Forces drove the "system" that assessed a student's interest or capability and binned them into very fixed curriculum. They were much greater than any student, whose sphere of influence was surprisingly limited. This type of meta-thinking made me keenly aware of the context of a large university's policies and the obstacles that stifle choice in education. I remember a friendly but heated exchange with a university official, who was implicitly hampered by that system. At one point, he questioned the advantages of having a humanities-

based education by simply asking, "why do you want to learn that warm, fuzzy stuff? Can't you just focus on engineering?" He was rightfully worried about students over-extending themselves and "disrupting the system." It was my contention that "you build a better bridge when you care about the traffic driving over it, or design a better car when you concern yourself with who's riding in it." That still holds for me today: that human-centered design has great power for positive change.

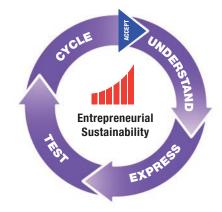
INTO THE AUTOMOTIVE REALM

hen I first arrived at Ford Motor Company, as a vehicle integration engineer (usually responsible for inter-system characteristics of a car, such as noise, vibration and harshness), the human resources department was not unlike a large university's. Thankfully, my experiences in undergraduate education prepared me to negotiate well. I would transfer to the corporate design studio, where the cars are drawn and sculpted, in two years. This was actually a pleasure to do — rotating throughout various engineering departments and getting a certificate degree in transportation design by attending evening classes at the local art school, the College for Creative Studies.

I had many formative moments as a car designer in Detroit. Our VP of Design at the time was J Mays, known for the design of the Audi TT and the Concept One, better known as the VW New Beetle. I remember his critiques on car designs that have often stuck with me. A few tidbits:

- a) J once gave an anecdote about causing consternation amongst the engineering team while at VW/Audi, when he insisted that the Allen head screws holding the Audi TT's chromed gas cap all face the exact same direction. His adamant stance demonstrated two things: 1) the willingness to drive manufacturing to the point of frustration, and 2) an obsessive attention to detail no matter how small, to genuinely care about visual presentation at all levels.
- b) The use of our designs to describe an aspirational narrative that must be told, and captures the zeitgeist of the moment. In the case of designs in the early 2000's, a story of optimism and familiarity (aka retro-futurism) for a post 9/11 world, shakily entering the 21st century.
- c) Car designers are artists, moviemakers, and particularly, sculptors of speed-forms, like a diamond cutter, painstakingly slicing away at the rough clay. Our raw materials are hunks of steel and aluminum, and we obsess over every facet, slowly cut and revealed, glinting

and catching the light through painted reflections, dazzling the eye. We were making jewelry in motion.



Creative craft comes with an extreme dedication in cultivating a diverse, expressive communication skillset. If you can imagine it, you can draw it; if you can draw it, you can build it, make a movie about it, write a song or story about it, etc. Note that I didn't say it had to work or be mass-produced: many of the concept cars we made didn't even have engines.

Contextual Awareness



21st century practitioners, design thinkers, and entrepreneurs must bring a newfound attention to context and situation. Current trends in meta-thinking engage the modern designer to contemplate not what is known or seen, but the implicit, hidden forces at work. This state of inquisitive curiosity spurs innovative solutions that disrupt markets.

Creative Craft



The creative confidence to bring any idea, whether it be product, environment, service, performance, policy, or business, to a realization where it can be tested against an audience. Flexible prototyping skills that matches the prototype's fidelity and resolution appropriate to the stage of development.

Rapid Iteration



Additive manufacturing, low-fidelity prototyping, agile development, and the push for flexible manufacturing all point to one main trend — Ever quicker cycles between the expression of an idea, and the solicitation of feedback from the audience. You gain more from multiple cycles made with users' feedback than from a single, high resolution solution.

What it had to do was tell a story, define a vision, spur a discussion, or impart a dream, and we did that in spades. The ability to tell a compelling, visual story through sketches, models, images, and animation, gave me a sense of **creative** confidence through mastery of a **craft**, and was something I took from this aspect of my career.

RE-EXAMINING EDUCATION

After my automotive experience, I went onto graduate studies in the Joint Program for Design at Stanford. I had first met David Kelley when I worked at IDEO Product Development during my undergraduate days. That was when I was first introduced

to the philosophy of human- centered design. Graduate studies in design reinforced many of the concepts I've outlined above, but in particular, focused on honing your design process though rapid iteration.



The startup culture of Silicon Valley, and the agile development philosophy of many of the tech companies on the West Coast introduced an idea of linking prototyping fidelity with design process. When a designer is self-aware

Empathy



An open mind, tolerance for others, and a beginner's view are critical empathic skills exhibited by the 21st century designer. Seek first to understand others different than you, rather than judge or categorize them. The ability to channel a subcultural group, "method act" their life, rather than dictate their behavior, speeds the adoption of the design.

Entrepreneurial Sustainability



For a design intervention to endure, the business model must be sustainable. Value, benefits, resources and costs must be in perfect balance. All great designers have been keenly aware of this alignment. "Anything that won't sell, I don't want to invent. Its sale is proof of utility, and utility is success."

- Thomas Edison

of the phases of the cycle - understanding and empathy, expression and creativity, testing and implementation, he or she begins to learn more about the user through each iteration, and expose implicit needs not easily seen through first blush. The entrepreneurial spirit of the area ingrained an appreciation for rapid, low-fidelity modeling, sustainability, and value proposition (balance between need, cost and perceived benefits). Soliciting feedback with actual customers, with quick models and expressions of your product, business, or service will prove more useful than refining alone, believing your "perfect" solution to be the best. It's amazing how much your own arrogance can get in the way of success.

I started teaching these concepts at Stanford in 2007, as they are central to innovation and creativity. My Georgia Tech career, first as a visiting and now endowed professor of practice, continues to build upon this foundation. As director of the Innovation and Design Collaborative, housed in the GT library, we are embarking on a journey of multi-disciplinary education, connecting faculty that are interested in teaching across disciplines, introducing hands-on, visceral approaches, and getting students to engage in their community in order to deliver social impact. We believe that the new 21st century pedagogy is rooted in teaching engineers, designers, and scientists how to best work together. These are the benefits of design behavior, linking creativity with rigor, art with science, and humanity with technology.

CLOSING IN

So, what are the tenets of the 21st century designer? These trans-disciplinary design behaviors, that I have picked up along the way, reinforced by great mentors and rich life experiences, are the cornerstones to a new type of design education.

- **1. Empathy**–appreciation for diverse perspectives,
- **2. Creative Craft**—the ability to express any idea in a compelling manner,
- **3. Contextual Awareness**–understanding the implicit rules to a greater system,
- **4. Rapid Iteration**–think, build, test, repeat, repeat, and
- **5. Entrepreneurial Spirit**–sustainability and value proposition.

Education that embraces these behaviors and provide an opportunity to design will fundamentally change how students integrate their disciplinary knowledge with others'. Coursework and teaching that encourages multidisciplinary collaboration will establish a culture of innovation, empowering the next generation to address the complex issues that we now face in society.



Wayne K. Li is the Oliver Professor of Practice in Design and Engineering. He received a Master of Science in Engineering from Stanford University, and undergraduate degrees in Fine Arts in Design and Mechanical Engineering from the University of Texas at Austin.

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M

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Directory of Leading U.S. Architecture and Design Programs Landscape Architecture B = Bachelor's degree ndustrial Design nterior Design D = D. Arch. degree Architecture M = Master's degree School City Web Address ALABAMA **Auburn University** Auburn auburn.edu В **B** M В M Samford University Birmingham samford.edu В Tuskegee University Tuskegee tuskegee.edu В University of Alabama Tuscaloosa ua.edu В Virginia College in Birmingham В Birmingham vc.edu Arizona State University М ВМ Tempe asu.edu В Art Institute of Phoenix Phoenix artinstitutes.edu/phoenix В Frank Lloyd Wright School of Architecture Scottsdale taliesin.edu M University of Arizona Tucson arizona.edu **B** M M **ARKANSAS** Harding University Searcv harding.edu В University of Arkansas B В В Fayetteville uark.edu University of Central Arkansas Conway uca.edu В **CALIFORNIA** Academy of Art University San Francisco B M B M academyart.edu B M Art Center College of Design Pasadena artcenter.edu **B** M Art Institute of California-Los Angeles Santa Monica artinstitutes.edu/losangeles В В Art Institute of California-Orange County Santa Ana artinstitutes.edu/orangecounty Oakland & SF Art Institute of California-San Diego artinstitutes.edu/sandiego San Francisco B M **B** M California College of the Arts cca.edu В California Polytechnic State Univ., San Luis Obisbo San Luis Obispo В В calpoly.edu California State Polytechnic University, Pomona csupomona.edu Pomona **B** M M B M California State University, Fresno Fresno csufresno.edu В **B** M California State University, Long Beach Long Beach csulb.edu В California State University, Northridge Northridge csun.edu В California State University, Sacramento Sacramento csus.edu Design Institute of San Diego San Diego disd.edu В Interior Designers Institute **Newport Beach** idi edu R NewSchool of Architecture & Design San Diego newschoolarch.edu B_M Otis College of Art and Design Los Angeles otis.edu В San Diego State University San Diego sdsu.edu В San Francisco State University San Francisco sfsu.edu B M San Jose State University San Jose sisu.edu В В

This listing does not include all new programs recently launched and/or non-accredited. This listing does not include all design programs in the United States. It does not include B.A., B.S., M.A., M.S., or Ph.D. programs in architecture. Only B.Arch, M.Arch and D.Arch degrees are represented in architecture.

Los Angeles

Berkeley

sciarc.edu

berkeley.edu

Southern California Institute of Architecture

University of California, Berkeley

						e
B = Bachelor's degree D = D. Arch. degree M = Master's degree			 Architecture	— ndustrial Design	— nterior Design	 -andscape Architecture
School	City	Web Address	Arct	l pul	Intel	Lan
University of California, Davis	Davis	ucdavis.edu				В
University of California, Los Angeles	Los Angeles	ucla.edu	M			
University of Southern California	Los Angeles	usc.edu	B M			M
Woodbury University	Burbank	woodbury.edu	B M		В	
COLORADO						
Art Institute of Colorado	Denver	artinstitutes.edu/denver		В	В	
Colorado State University	Fort Collins	colostate.edu			В	В
Metropolitan State College of Denver	Denver	mscd.edu		В		
Rocky Mountain College of Art & Design	Lakewood	rmcad.edu			В	
University of Colorado Denver	Denver	ucdenver.edu	М			М
CONNECTICUT					,	
University of Bridgeport	Bridgeport	bridgeport.edu		В		
University of Connecticut	Storrs	uconn.edu				В
University of Hartford	West Hartford	hartford.edu	М			
Yale University	New Haven	yale.edu	M			
DISTRICT OF COLUMBIA						
Catholic University of America	Washington	cua.edu	M			
George Washington University	Washington	gwu.edu			ВМ	
Howard University	Washington	howard.edu	В			
University of The District of Columbia	Washington	udc.edu	M			
FLORIDA						
Art Institute of Fort Lauderdale	Fort Lauderdale	artinstitutes.edu/fortlauderdale		В	В	
Florida A&M University	Tallahassee	famu.edu	B M			
Florida Atlantic University	Fort Lauderdale	fau.edu	В			
Florida International University	Miami	fiu.edu	M		M	M
Florida State University	Tallahassee	fsu.edu			В	
Miami International University of Art & Design	Miami	artinstitutes.edu/miami			В	
Ringling School of Art and Design	Sarasota	ringling.edu			В	
Sanford Brown College	Tampa	sanfordbrown.edu			В	
University of Florida	Gainesville	ufl.edu	M		В	B M
University of Miami	Miami	miami.edu	B M			
University of South Florida	Tampa	usf.edu	M			
GEORGIA						
American InterContinental University	Atlanta	aiubuckhead.com			В	
Art Institute of Atlanta	Dunwoody	artinstitutes.edu/atlanta			В	
Brenau University	Gainesville	brenau.edu			B M	
Georgia Institute of Technology	Atlanta	gatech.edu	M	B M		
Georgia Southern University	Statesboro	georgiasouthern.edu			В	
Savannah College of Art and Design	Savannah & Atlanta	scad.edu	M	B M	B M	
Southern Polytechnic State University	Marietta	spsu.edu	В		_	D ac
University of Georgia	Athens	uga.edu			В	B M

 B = Bachelor's degree D = D. Arch. degree M = Master's degree 			 Architecture	 Industrial Design	— Interior Design	 Landscape Architecture
School	City	Web Address	Arc	2	=	La
HAWAII						
Chaminade University of Honolulu	Honolulu	chaminade.edu			В	
University of Hawaii at Manoa	Honolulu	hawaii.edu	D			
IDAH0						
Brigham Young University-Idaho	Rexburg	byui.edu			В	
University of Idaho	Moscow	uidaho.edu	M		В	M
ILLINOIS						
Columbia College Chicago	Chicago	colum.edu		В	В	
Harrington College of Design	Chicago	interiordesign.edu			В	
Illinois Institute of Art-Chicago	Chicago	artinstitutes.edu/chicago			В	
Illinois Institute of Art–Schaumburg	Schaumburg	artinstitutes.edu/schaumburg			В	
Illinois Institute of Technology	Chicago	iit.edu	ВМ			М
Illinois State University	Normal	ilstu.edu			В	
Judson University	Elgin	judson.edu	М			
School of the Art Institute of Chicago	Chicago	saic.edu	M	ВМ	ВМ	
Southern Illinois University Carbondale	Carbondale	siu.edu	М	В	В	
University of Illinois at Chicago	Chicago	uic.edu	M	BM	ļ-	
University of Illinois at Urbana–Champaign	Urbana-Champaign	illinois.edu	M	B M		ВМ
, , , , , ,	Orbana Onampaign	IIIIII0i3.cuu		D		D III
INDIANA						
Ball State University	Muncie	bsu.edu	M		В	B M
Indiana State University	Terre Haute	indstate.edu			В	
Indiana University	Bloomington	indiana.edu			В	
Indiana University - Purdue University Indianapolis	Indianapolis	iupui.edu			В	
Purdue University	Lafayette	purdue.edu		B M	В	В
University of Notre Dame	Notre Dame	nd.edu	B M	B M		
IOWA						
Iowa State University	Ames	iastate.edu	B M		В	B M
KANSAS						
Kansas State University	Manhattan	k-state.edu	M	М	ВМ	М
University of Kansas	Lawrence	ku.edu	M	ВМ		
KENTUCKY						
University of Kentucky	Lexington	uky.edu	М		В	В
University of Louisville	Louisville	louisville.edu			В	
LOUISIANA	Louisviiis	Toulovillo.odu				
Louisiana State University	Baton Rouge	Isu.edu	ВМ		В	ВМ
Louisiana Tech University	Ruston	latech.edu	M		В	J W
Southern University and A&M College					В	
, , , , , , , , , , , , , , , , , , , ,	Baton Rouge	subr.edu	В			
Tulane University	New Orleans	tulane.edu	M			
University of Louisiana at Lafayette	Lafayette	louisiana.edu	М	В	В	
MARYLAND						
Morgan State University	Baltimore	morgan.edu	M			M
University of Maryland	College Park	umd.edu	M			B M

B = Bachelor's degree D = D. Arch. degree M = Master's degree School	City	Web Address	Architecture	Industrial Design	Interior Design	Landscape Architecture
MASSACHUSETTS						,
Boston Architectural College	Boston	the-bac.edu	B M		B M	B M
Endicott College	Beverly	endicott.edu			В	
Harvard University	Cambridge	harvard.edu	M			M
Massachusetts College of Art and Design	Boston	massart.edu	M	В		
Massachusetts Institute of Technology	Cambridge	mit.edu	M			
Mount Ida College	Newton	mountida.edu			В	
New England School of Art & Design at Suffolk U.	Boston	suffolk.edu/nesad			B M	
Northeastern University	Boston	northeastern.edu	M			
University of Massachusetts Amherst	Amherst	umass.edu	M			B M
Wentworth Institute of Technology	Boston	wit.edu	M	В	В	
MICHIGAN						
Andrews University	Berrien Springs	andrews.edu	М			
Central Michigan University	Mount Pleasant	cel.cmich.edu			В	
College for Creative Studies	Detriot	collegeforcreativestudies.edu		ВМ	В	
Cranbrook Academy of Art	Bloomfield Hills	cranbrookart.edu		M		
Eastern Michigan University	Ypsilanti	emich.edu			В	
Int'l Academy of Design & Technology, Detroit	Troy	iadtdetroit.com			В	
Kendall College of Art and Design	Grand Rapids	kcad.edu		В	В	
Lawrence Technological University	Southfield	ltu.edu	M		В	
Michigan State University	East Lansing	msu.edu			В	В
Northern Michigan University	Marquette	nmu.edu		В		
University of Detroit Mercy	Detroit	udmercy.edu	М			
University of Michigan	Ann Arbor	umich.edu	M	B M		M
Wayne State University	Detroit	wayne.edu		ВМ		
Western Michigan University	Kalamazoo	wmich.edu			В	
MINNESOTA						
Dunwoody College of Technology	Minneapolis	dunwoody.edu			В	
University of Minnesota	St. Paul	umn.edu	M		В	М
MISSISSIPPI						
Mississippi College	Clinton	mc.edu			В	
Mississippi State University	Mississippi State	msstate.edu	В		В	ВМ
University of Southern Mississippi	Hattiesburg	usm.edu			В	
MISSOURI						
Drury University	Springfield	drury.edu	M			
Maryville University	St. Louis	maryville.edu			В	
University of Central Missouri	Warrensburg	ucmo.edu			В	
University of Missouri–Columbia	Columbia	missouri.edu			BMD	
Washington University in St. Louis	St. Louis	wustl.edu	М			М
MONTANA						
Montana State University	Bozeman	montana.edu	М			

B = Bachelor's degree D = D. Arch. degree M = Master's degree			Architecture	 ndustrial Design	— nterior Design	 Landscape Architecture
School	City	Web Address	Archit	snpul	- nteric	
NEBRASKA						
University of Nebraska at Kearney	Kearney	unk.edu			В	
University of Nebraska–Lincoln	Lincoln	unl.edu	M		В	В
NEVADA						
Art Institute of Las Vegas	Henderson	artinstitutes.edu/lasvegas			В	
University of Nevada, Las Vegas	Las Vegas	unlv.edu	M		В	В
NEW JERSEY						
Kean University	Union	kean.edu		В	В	
Montclair State University	Upper Montclair	montclair.edu		B M		
New Jersey Institute of Technology	Newark	njit.edu	ВМ		В	
Princeton University	Princeton	princeton.edu	M			
Rutgers, The State University of New Jersey	New Brunswick	rutgers.edu				ВМ
NEW MEXICO						
Southwest University of Visual Arts	Albuquerque	suva.edu			В	
University of New Mexico	Albuquerque	unm.edu	M			M
NEW YORK						
Buffalo State College, SUNY	Buffalo	buffalostate.edu			В	
City College of New York, CUNY	New York	ccny.cuny.edu	ВМ			М
College of Environmental Science and Forestry, SUNY	Syracuse	esf.edu				ВМ
Columbia University	New York	columbia.edu	М			
Cooper Union	New York	cooper.edu	В			
Cornell University	Ithaca	cornell.edu	B M		В	ВМ
Fashion Institute of Technology, SUNY	New York	fitnyc.edu			В	
New York Institute of Technology	various	nyit.edu	В		В	
New York School of Interior Design	New York	nysid.edu			ВМ	
Parsons The New School for Design	New York	parsons.edu	М	ВМ	ВМ	
Pratt Institute	Brooklyn	pratt.edu	B M	B M	В	
Rensselaer Polytechnic Institute	Troy	rpi.edu	BM			
Rochester Institute of Technology	Rochester	rit.edu	М	ВМ	В	
School of Visual Arts	New York	schoolofvisualarts.edu			В	
Syracuse University	Syracuse	syr.edu	B M	ВМ	В	
University at Buffalo, SUNY	Buffalo	buffalo.edu	M			
Villa Maria College	Buffalo	villa.edu			В	
NORTH CAROLINA						
Appalachian State University	Boone	appstate.edu		В	В	
East Carolina University	Greenville	ecu.edu			В	
High Point University	High Point	highpoint.edu			В	
Meredith College	Raleigh	meredith.edu			В	
North Carolina A&T State University	Greensboro	ncat.edu				В
North Carolina State University	Raleigh	ncsu.edu	B M	ВМ		ВМ
University of North Carolina at Charlotte	Charlotte	uncc.edu	ВМ			

B = Bachelor's degree D = D. Arch. degree M = Master's degree School	City	Web Address	—- Architecture	Industrial Design	Interior Design	 Landscape Architecture
University of North Carolina at Greensboro	Greensboro	uncg.edu			В	
Western Carolina University	Cullowhee	wcu.edu			В	
NORTH DAKOTA						
North Dakota State University	Fargo	ndsu.edu	М		В	В
OHIO						
Cleveland Institute of Art	Cleveland	cia.edu		В		
Columbus College of Art & Design	Columbus	ccad.edu		В	В	
Kent State University	Kent	kent.edu	М		В	
Miami University	Oxford	muohio.edu	М		В	
Ohio State University	Columbus	osu.edu	М	ВМ	В	ВМ
Ohio University	Athens	ohiou.edu			В	
University of Akron	Akron	uakron.edu			В	
University of Cincinnati	Cincinnati	uc.edu	М	В	В	
OKLAHOMA	omonina.					
Oklahoma Christian University	Oklahoma City	oc.edu			В	
Oklahoma State University	Stillwater	okstate.edu	В		В	В
University of Central Oklahoma	Edmund	uco.edu			В	
University of Oklahoma	Norman	ou.edu	ВМ		В	М
OREGON	Norman	ou.euu	D IVI		D	IVI
Art Institute of Portland	Portland	artinatitutae adu/partland		В	В	
Marylhurst University	Marylhurst	artinstitutes.edu/portland marylhurst.edu		D	В	
Oregon State University	Corvallis	oregonstate.edu			В	
Portland State University	Portland	pdx.edu	М			
•	Eugene	uoregon.edu	B M	В	вм	ВМ
University of Oregon	Eugene	uoregon.euu	D IVI	D	D IVI	D IVI
PENNSYLVANIA	DI 11					
Art Institute of Philadelphia	Philadelphia	artinstitutes.edu/philadelphia		В	В	
Art Institute of Pittsburgh	Pittsburgh	artinstitutes.edu/pittsburgh		В	В	
Carnegie Mellon University	Pittsburgh	cmu.edu	В	B M		
Chatham University	Pittsburgh	chatham.edu			ВМ	M
Drexel University	Philadelphia	drexel.edu	В	В	ВМ	
La Roche College	Pittsburgh	laroche.edu			В	
Marywood University	Scranton	marywood.edu	В			
Moore College of Art & Design	Philadelphia	moore.edu			В	
Pennsylvania State University	State College	psu.edu	B M			B M
Philadelphia University	Philadelphia	philau.edu	В	B M	В	В
Temple University	Philadelphia	temple.edu	M			B M
University of Pennsylvania	Philadelphia	upenn.edu	M			M
University of the Arts	Philadelphia	uarts.edu		B M		
PUERTO RICO						
Polytechnic University of Puerto Rico	San Juan	pupr.edu	В			М

B = Bachelor's degree D = D. Arch. degree M = Master's degree	Lou		 Architecture	— ndustrial Design —	Interior Design	— Landscape Architecture
School	City	Web Address	Ā	흐	트	=
RHODE ISLAND	D. Maria	4-4-4	B.11	D.14	D.11	
Rhode Island School of Design	Providence	risd.edu	B M	B M	ВМ	М
Roger Williams University	Bristol	rwu.edu	M			
University of Rhode Island	Kingston	uri.edu				В
SOUTH CAROLINA						
Clemson University	Clemson	clemson.edu	M		_	B M
Converse College	Sparttanburg	converse.edu			В	
Winthrop University	Rock Hill	winthrop.edu			В	
SOUTH DAKOTA						
South Dakota State University	Brookings	sdstate.edu	M		В	
TENNESSEE						
Intl. Acadamy of Design & Technology	Nashville	iadtnashville.com			В	
Middle Tennessee State University	Murfreesboro	mtsu.edu			В	
O'More College of Design	Franklin	omorecollege.edu			В	
University of Memphis	Memphis	memphis.edu	M		В	
University of Tennessee at Chattanooga	Chattanooga	utc.edu			В	
University of Tennessee–Knoxville	Knoxville	utk.edu	B M		В	M
Watkins College of Art, Design & Film	Nashville	watkins.edu			В	
TEXAS						
Abilene Christian University	Abilene	acu.edu			В	
Art Institute of Austin	Austin	artinstitutes.edu/austin			В	
Art Institute of Dallas	Dallas	artinstitutes.edu/dallas			В	
Art Institute of Houston	Houston	artinstitutes.edu/houston			В	
Baylor University	Waco	baylor.edu			В	
Prairie View A&M University	Prairie View	pvamu.edu	M			
Rice University	Houston	rice.edu	B M			
Sam Houston State University	Huntsville	shsu.edu			В	
Stephen F. Austin State University	Nacogdoches	sfasu.edu			В	
Texas A&M University	College Station	tamu.edu	M			B M
Texas Christian University	Fort Worth	tcu.edu			В	
Texas State University–San Marcos	San Marcos	txstate.edu			В	
Texas Tech University	Lubbock	ttu.edu	М		В	B M
University of Houston	Houston	uh.edu	B M	B M		
University of the Incarnate Word	San Antonio	uiw.edu			В	
University of North Texas	Denton	unt.edu			В	
University of Texas at Arlington	Arlington	uta.edu	М		В	М
University of Texas at Armigion						
University of Texas at Austin	Austin	utexas.edu	B M		В	M

B = Bachelor's degree D = D. Arch. degree M = Master's degree			 Architecture	— ndustrial Design	— Interior Design	 Landscape Architecture
School	City	Web Address	Arch	lndt	Inte	Lan
UTAH						
Brigham Young University	Provo	byu.edu		В		
University of Utah	Salt Lake City	utah.edu	M			
Utah State University	Logan	usu.edu			В	B M
Weber State University	Ogden	weber.edu			В	
VERMONT						
Norwich University	Northfield	norwich.edu	M			
VIRGINIA						
Art Institute of Washington	Arlington	artinstitutes.edu/arlington			В	
Hampton University	Hampton	hamptonu.edu	M			
James Madison University	Harrisonburg	jmu.edu			В	
Marymount University	Arlington	marymount.edu			B M	
Radford University	Radford	radford.edu			В	
University of Virginia	Charlottesville	virginia.edu	M			M
Virginia Commonwealth University	Richmond	vcu.edu			ВМ	
Virginia Polytechnic Institute and State Univ.	Blacksburg	vt.edu	B M	В	В	B M
WASHINGTON						
Art Institute of Seattle	Seattle	artinstitutes.edu/seattle		В	В	
Bellevue College	Bellevue	bellevuecollege.edu			В	
University of Washington	Seattle	washington.edu	М	ВМ		B M
Washington State University	Pullman & Spokane	wsu.edu	M		В	В
Western Washington University	Bellingham	wwu.edu		В		
WEST VIRGINIA						
University of Charleston	Charleston	unwv.edu			В	
West Virginia University	Morgantown	wvu.edu			В	B M
WISCONSIN						
Milwaukee Institute of Art & Design	Milwaukee	miad.edu		В		
Mount Mary College	Milwaukee	mtmary.edu			В	
University of Wisconsin–Madison	Madison	wisc.edu			В	В
University of Wisconsin–Milwaukee	Milwaukee	uwm.edu	M			
University of Wisconsin–Stevens Point	Stevens Point	uwsp.edu			В	
University of Wisconsin–Stout	Menomonie	uwstout.edu		В	В	
OTHER						
American University of Sharjah	Sharjah, UAE	aus.edu	В			

DesignIntelligence 2015 Research Participants

1,426 U.S. firms and organizations employing architecture, design, and landscape architecture professionals participated in this year's research. Many firms listed have branch offices in multiple locations.

!melk 10 Design

1100 Architect PC 20 Bruce Park Avenue

24° Studio

360 Architecture 3D Design Studio 3six0 Architecture

4080 Architecture 4240 architecture, inc

4moms

AAI Engineering Aaron W. West, AIA

Abacus Architects + Planners

Abel Design Group Abourass Design Lab

AC martin **ACAI Associates ACTWO Architects** Acuform Architecture **Acuity Brands Lighting**

ADD Inc.

ADL Planning Associates

Adrian Smith + Gordon Gill Architecture

AECOM Aedas

Affiniti Architects AGER Group AgriNETx LLC

Aiton Anderson Architecture

akw, inc .

al weisz architecture Albert & Associates Architects

Alberto & Associates

Alfredo De Vido Associates Architects

Allee' Bubba Inc

Allegro Interior Architecture Aller-Lingle-Massey Architects P.C. Alley, Williams, Carmen & King, Inc.

alt breeding schwarz Altgelt & Associates

AM/MOR architecture LLP

Altoon Partners AMB Architects

amdg architects inc American Landscape

Ames Associates, LLC AMMOR Architecture LLP

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Amuse Management Group Inc Amy Devault Interior Design Anderson Brulé Architects, Inc.

Anderson Porter Design

Anderson Todd. FAIA Architect and

Planning Consultant

andrew benner architecture bureau Andrew Lee King Fun & Associates

Architects Ltd.

Andrew Novak Architect

Andropogon **ANF Architects**

Ankrom Moisan Architects anmahian winton architects Ann Beha Architects

Anoka County

ARC / Architectural resources

Cambridge arc one associates Archaeo Architects Archetype Myanmar LTD

Archimedia Archi-tectonics

architects design group, inc Architectural Design Guild

Architectural Resources Cambridge

Architecture for Humanity Architecture Incorporated Architecture Is Fun. Inc. Architecture Research Office

architecture+ Architecture 5280, LLC ArchWorks, Inc.

Ar-EA Armstrong + Cohen Architecture

Arquitectonica Arrowstreet, Inc. Art+Design Limited

ARTEKNA

ArcVision

arthur robishaw architect

Arup AS+GG ASD Inc Asmara Design

Association for Energy Affordability

Atelier Architects. Inc. Atelier Cho Thompson Atelier Dorce Inc. Atelier Hitoshi Abe

Atelier New York Architecture

atelier Ngai Atelier Ten

Athens-Clarke County Unified

Government Atlanta BeltLine, Inc. Auburn University

Auerbach Pollock Friedlander August Gerard Schwartz - Landscape

Architecure

AUNA architecture design

Autodesk, Inc. **AVRP Studios** AWB Engineers Axi:0me IIc Avers Saint Gross

BachArch Back 40

BAIXA ATELIER DE ARQUITECTURA LDA

Ballinger

Ball-Noques Studio, LLC Balodemas Architects, Chtd.

BAR Architects

Barker Rinker Seacat Architecture BarlisWedlick Architects Barnette Bagley Architects, PSC

Barton Phelps and Associates **Battelle**

BAUER Architects Baum-kuchen Baxt Inqui Architects

Bay Design Associates Architects, PL

Baylis Architects Bayview EEI

BBCO Design
BBH Design
BCHO architecture
Beau Clowney Design
BECHTEL CORPORATION
Becker Morgan Group Inc
Beeson, Lusk & Street Architects

Behnisch Architekten Belinda Stewart Architects, PA

Bellwether

Belzberg Architects Benjamin C Johnson LA Bennett Sullivan Associates

Bensonwood Bentel & Bentel

Berardi+Partners, Inc., Architects/

Engineers
Bercy Chen Studio
Berggren Architecs
Bergman Walls & Assoc
Bergmann Associates
Bernard Trainor + Associates
berry/spatz architects
Bestor Architecture

Between Built & Natural Environments

BEYER BLINDER BELLE

Beyond Metal Bialek Environments bickel group BIG

Big Muddy Workshop, Inc.

Bignell Watkins Hasser Architects PC Bildsten + Sherwin Design Studio Inc

Billingsley Company

Billingsiey Company Bilow Garrett Group bink architects Bjarke Ingles Group BL Companies Blackburn Architects PC

Blasen Landscape Architecture Blostein/Overly Architects

BLT Architects Blue Ridge Architects

BluPath BMLA, Inc. BNIM

Bohlin Cywinski Jackson BOKA Powell, LLC BOLTgroup

Bonet Design Studio Inc. Bonnin Orozco Arquitectos **Boomhover Architecture**

Booth Hansen

Borroto Architecture & Planning

Boudreaux Associates Boulder Associates

Boynton Rothschild Rowland

Architects PC

Braun & Steidl Architects

Brawer & Hauptman, Architects LLC

Brereton Architects

Brezavar & Brezavar Architects.com

brg3s Brickman Britto Charette

Brown Richardson + Rowe, Inc. Browning Day MUllins Dierdorf

brph

Bruce D Vander Wiele Architect Inc

Bruner/Cott & Associates BSA LifesStructures BSB's Design

bSTUDIO Architectural Design

Built Form bunch design

Burlingame Interiors Ltd.

Butler Rowland Mays Architects, LLP

BVH Architects BWBR Architects

C.T. Male Associates

C/TEC Critical Facilities Group

C+D

Cagley & Tanner

Cairone & Kaupp Incorporated

callison Caltrans

Calvin, Giordano & Assocaites, Inc.
Cambridge Seven Associates, Inc.
Campani and Schwaarting Architects
Campion Hruby Landscape Architects

Canizaro Cawthon Davis Cannon Design Cardno JFNew

Carducci & Associates

Carl Jones Landscape Architecture &

Design

Carlile Macy carrier johnson+ culture Carte Blanche Studio

Carters, Inc. Caruso Affiliated Casaccio Yu Architects

CASCO
Cassidy Turley
Cawrse\$Assoc. Inc.
CBJ Engineering
CBT Architects, Inc.

CCG Facilities Integration Inc.

CCS Architecture

CDA&I Architecture and Interiors

CDG CDM Smith CDP Engineers

Central Houston / Downtown District

CHA Consulting

Charles Henkels Architects

Chelsea Hotels

Chiang O'Brien Architects, DPC

Chick-fil-A, Inc.

Childress Engineering Services Christoper P Williams Architects Chu+Gooding Architects Churchill Enterprises International

City of Chattanooga City of Franklin City of Madison, WI Civic Design and Planning CJC Architects, Inc.

Claflen Associates Architects +

Planners

Clark Condon Associates, Inc. Clark Construction Group

Clark Nexsen Clean Desgin Clearscapes, PA

Clemens Bruns Schaub Architect &

Associates, PA

Clinvue CO Architects Cobalt Office

Coleman and Associates CollinsWoerman

Community Design Solutions

Compañia Constructora Metro SA de CV

Condia+Ornelas Architects Container Research Corporation contemporary architecture practice

Continuum

Cooke Douglass Farr Lemons COOKFOX Architects

Cooper Carry

Cooper Robertson & Partners

Cordogan, Clark & Associates

Corgan

Cowart Group PC Crafton Tull

Craig, Gaulden, Davis Creative Resource Associates

Creoworks Crome Architecture Cromwell AE Cronrath Design

Crown Equipment Corp

Crown Center Redevelopment Corp

CRSA Architecture
CUBE3 Studio
Culvahouse Consulting
Cummings & McCrady Inc.
Cuningham Group Architects
Cunningham | Quill Architects
Curtis + Ginsberg Architects LLP
Cybul, Cybul, and Wilhelm Architects

D. Michael Hamner AIA, Architects

CYLA Design Associates, Inc.

Czopek Design Studio

D2D green Interiors Dadras Architects Daedalus Workshop LLC

DAG Architects

Dahn & Krieger Architects Planners PC
Damian Farrell Design Group
Danger Marine Design
Daniel Park Design
Danielian Associates
Daroff Design
DAS Architects Inc.

David M. Schwarz Architects David Reed Landscape Architects David Scott Parker Architects David Smotrich & Partners

David Takacs Architecture
David Thompson Architects
David Vandervort Architects PS

David Virtue, Architects
Davis Carter Scott
Davis Partnership Architects

Davis Wince Ltd.
Davy Architecture, APC

DCS

DDG DESIGN STUDIO INC Deakins Design Group dean alan architects pllc **DEKA Research and Development**

Dekey Global Concept Ltd

Delve Interiors

Department of city planning Derck & Edson Associates DES architects + engineers

DesginGroup
Design 88
Design Apparatus
Design Associates
Design Collaborative
Design Development

Design Management Associates

Design Opera Inc.

Design Partners Incorporated

design science
Design Workshop, Inc
DesignARC - LA
DESIGNLYNX LLC
Designs for Industry
DesignSpec
DesignStrategies, LLC

Desmone & Associates Architects

Devcon Construction, Inc.

Dewberry DHM Design

Dick & Fritsche Design Group Diego Arteta Diseño Diller Scofidio + Renfro DiMarzio Kato Architecture Dimcheff Smith Studio DiMella Shaffer Architects Dimensions Foundation Dirtt environmental solutions

Dirtworks Landscape Architecture, PC

Dix.Hite+Partners

dlandstudio pllc architecture and landscape architecture

DLM Architects DLR Group dlw architects

DMA DNA

Domus Design Group domusstudio architecture Dougherty + Dougherty Architec

Dover Kohl & Partners DP Architects Pte Ltd Drake Design Associates

Dryden Abernathy Architecture Design,

LLC

DSB Plus LLC DSGN Associates DSH // architecture dSPACE Studio DTJ Design

DTLS Landscape Architects
Duda Paine Architects
Dwell Design Studio

dwg.

DXA studio DYKEMAN

Dynamic Environments Inc.

E. Cobb Architects
EAF Design Studio
Earl Swensson Associates
Eckenhoff Saunders Architects
EcoLand Design Goup, LLC

EDA Architects
Edmund Hollander Landscape Architects

EDSA. Inc.

Eduardo Fernando Guillen & Associates

Architects

edward niles architecture, planning f.a.i.a.

Ehrenclou Architects
Ehrlich Architects
eisenman architects
el dorado inc

Elkus Manfredi Architects

elm environments

emerymcclure architecture: University

of Louisiana at Lafayette

Energy Architecture Environetics

Environmental Resources Management

EnviroTech Designs Envirotecture, Inc.

EPG

Epstein Architecture & Engineering

EPTDESIGN

Eric Colbert & Associates PC Architects

Eric Owen Moss Architects Eric Rosen Architects Inc Erika Winters Design

Escher GuneWardena Architecture

Eskew+Dumez+Ripple Ethelind Coblin Architect

evO(a)_IAb EwingCole

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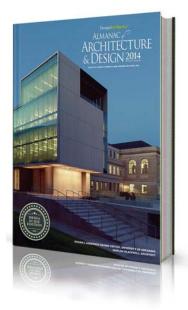


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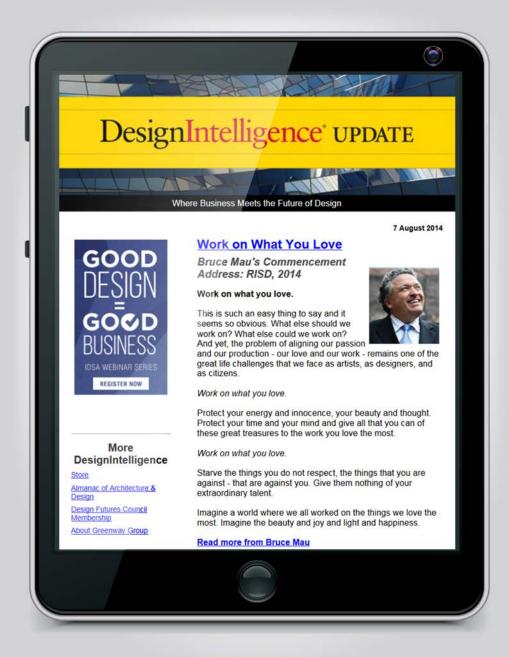
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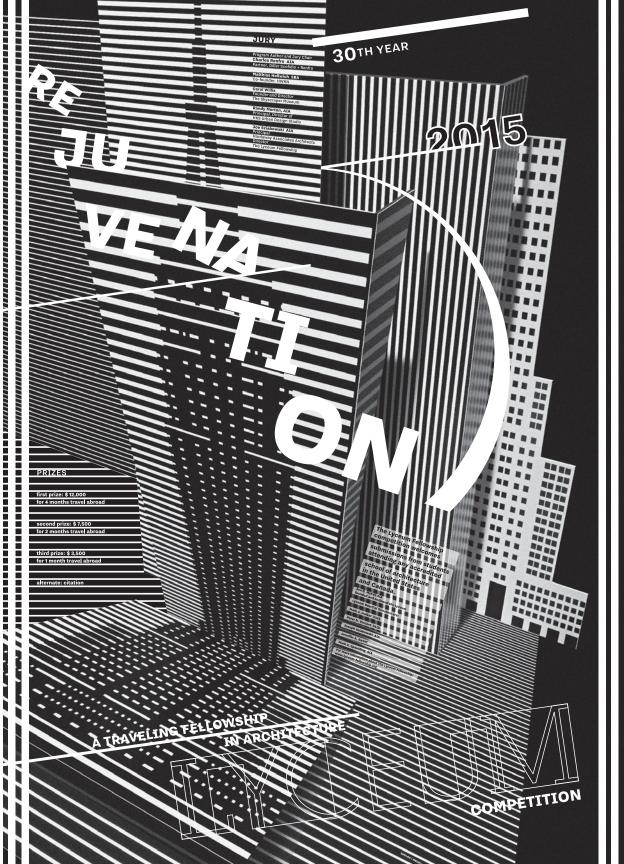
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