Bachelor of Architecture Program

College of Architecture & The Built Environment
Welcome!

This is an introduction to the Bachelor of Architecture Program at Thomas Jefferson University in Philadelphia.

In this presentation we will review:
• A Program Description
• The Plan of Study
• Minors & Graduate Programs
• Outcomes
• Facilities & Career Services
• Sample Student Work
• Student, Faculty & Alumni Profiles
David Kratzer, AIA
DIRECTOR, ARCHITECTURE PROGRAMS
The RHJ Associates P.C. Term Chair for Architecture

Please email me with any questions or requests as these are exciting times.
College of Architecture & The Built Environment (CABE)

- Balance between theory and practice, design excellence and making
- Unique combination of disciplines = interdisciplinary collaboration
- Preparing to be future leaders in their fields
- Core Values
  - Sustainability
  - Social Equity
  - Design Excellence
College of Architecture & The Built Environment

Nexus Learning: A Core Teaching Value

Active, Collaborative
Real-World Learning
Infused with the Liberal Arts / Hallmarks

Emphasis on Developing
Curiosity and Confidence
Empathy and Collaboration
Initiative and Ethical Reflection
Contextual Understanding/Global View
Bachelor of Architecture Program

• Is a 5-year professional degree program

• Is for students interested in becoming professionally licensed Architects

• Is a NAAB-accredited degree program
  (National Architectural Accrediting Board)
  • degree is required to be eligible for licensure
What is the difference between a 5-year BArch and 4+2 program?

BArch: 5 Years + 2 AXP = 7 Years to Licensure
MArch: 4+2 Years + 2 AXP = 8 Years to Licensure

Getting the most from your education
The Bachelor of Architecture Studio Sequence

The core of our program are the Design & Visualization Studios

- The Design Studios Conclude with Research Studios such as Future Cities & Global Health
- The Vis Studios start with hand drawing and end with 3-D modeling/digital fabrication
The Bachelor of Architecture Studio Sequence

Design Studio 7 - Study Abroad

Semester-long Programs
- UARC Rome
- DIS Copenhagen
- IE Univ. Segovia
- Bauhaus Germany

Nexus Abroad Summer Programs
- Central Europe, Southern Europe, India

Faculty-led Short Courses
- South Africa
- Czech Republic
The Bachelor of Architecture History Theory Sequence

The History Theory sequence sets up a strong cultural foundation

- These courses set a context for understanding architecture & our study abroad programs
- Students are required to take on a highly focused theory seminar

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<th>CURRICULAR SEQUENCE</th>
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<td>HISTORY + THEORY</td>
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The Bachelor of Architecture Technology Sequence

A seven-course sequence moving from basic materials to building performance

- Technology is considered “a means for making” though hand and computer work
- Advanced computer software is used to study building energy & material performance

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<td>TECHNOLOGY</td>
<td>MATH 1 INTRO TO CALCULUS 3CR</td>
<td>MATH 2 OR ELECTIVE 3CR</td>
<td>ARCH-303 STRUCTURES 1 - Linear Forces 3CR</td>
<td>ARCH-304 STRUCTURES 2 - Columns &amp; Beams 3CR</td>
<td>ARCH-416 TECH 5 REVIT + Documents 3CR</td>
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<td>ARDS-210 TECH 1 Materials &amp; Methods 3CR</td>
<td>ARCHDSN 3CR</td>
<td>ARCH-314 TECH 4 Applied Systems + Performance 3CR</td>
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**PLAN OF STUDY**
The Bachelor of Architecture Elective/Minor Sequence

The elective sequence sets up focused Minors, Certificates & Combined UG+G Degrees

- In the fourth & fifth years, students can declare minors in areas of interest
- These choices can lead to Accelerated Combined UG and G Degrees

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<td>ELECTIVE 12 CR MINORS, CERTIFICATES &amp; A NUMBER OF DUAL DEGREES</td>
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<td>GEO - GeoDesign</td>
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<td>CM - Construction Management</td>
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<td>HP - Historic Preservation</td>
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<td>ELECTIVE 3CR</td>
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College of Architecture & Built Environment

Minors - minimum 12 credits

- Historic Preservation
- Photography
- Interior Design
- Landscape Design or Planning
- Sustainable Design
- Construction Management
- GIS
- GeoDesign
- Business
- Real Estate Development
College of Architecture & Built Environment
Graduate Programs

Master of Architecture
MS in Architecture
MS in Construction Management
MS in GeoDesign
MS in Historic Preservation
MS in Interior Architecture
MS in Real Estate Development
MS in Sustainable Design
College of Architecture & Built Environment
Accelerated Dual Degrees

Through coordination of your minors, you can continue into a graduate degree adding to your professional competitiveness

Undergraduate Degree + Graduate Degree
B. Architecture + M.S. Real Estate Development (5+1)
B. Architecture + M.S. Historic Preservation (5+1)
B. Architecture + M.S. Interior Architecture (5+2)
## OUTCOMES

### Retention Rate

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<th>RETENTION RATE</th>
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<td>85%</td>
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Retention Rate for CABE in 2018

### Placement Rate

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<th>PLACEMENT RATE</th>
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First Destination Report Class of 2019:
Employment and Graduate School Success Rate for CABE

### Distinctions

- 1 Fulbright Teaching Scholar: Professor Chris Harnish
- **FIVE TIME WINNER** of John Stewardson Fellowship Competition

### Awards

- *Architect Magazine* Studio Prize, 2019 (Malawi Studio)
- 1st Prize: 2014 ACSA International Student Steel Design Competition
- 1st Prize for Office Building: 2019 DOE Race to Zero Solar Decathlon Design Challenge Competition

### Employers of Jefferson Graduates

- Gensler
- HOK
- Jacobs
- WRT
- Stantec
- Kieran Timberlake
- Ballinger
- WRT
- Nelson Worldwide
- Michael Graves
- EwingCole
- SmithGroup
Architect

**OUTLOOK**

“Architects plan and design structures, such as private residences, office buildings, theaters, factories, and other structural property.”

“Employment of architects is projected to grow 8 percent from 2018 to 2028, faster than the average for all occupations.”

**SALARIES**

| MAX       | $138,120 |
| MEDIAN    | $79,380  |
| START     | $48,020  |

Sources: U.S. Bureau of Labor Statistics
College Facilities

CABE has state of the art studio spaces with individual computer screens, distanced learning labs, computer labs, and active learning classrooms

Mirrors professional work environments
College Facilities

FabLabs: Analog and digital fabrication spaces

- Comprehensive wood-shop
- Laser cutters
- CNC Router
- Over 30 3-D printers in studios

SEE Gallery
• American Institute of Architects (AIA)
  • National, State and Local Chapters

• Society of American Registered Architects (SARA)
  • National, State and Local Chapters

• National Council of Architectural Registration Boards (NCARB)
  • Association which allows architects to transfer licenses to other states

• U.S. Green Building Council (GBC)
  • LEED Rating Systems
Career Services

- Design Expo
- Portfolio Preparation
- *On-Line* portfolios
- Interview Days
- Professional Internships for Credit
In completion of designs, students are required to consider a full balance of Site, Program, Form, Technology and Sustainability.

In this example Hutton Moyer designed a health facility proposal fully considering the site, construction materials and program spaces.
Student Work  
Trans-disciplinary Projects

In our studios, students work collaboratively with students and faculty in other disciplines as they will in the real world.

In this example Richard Jansen and his studio colleagues worked with the Jefferson Health Science program to design a collaboration center exploring natural organic systems.
Student Work

Socially Responsible Projects

In completion of designs, issues of community, social equity and cultural sustainability are extremely important factors to study and incorporate.

In this example Hardi Shah explored ideas to lower traffic fatality rates in Malawi, Africa.
Student Work
5th Year Research Studios

The fifth year experience is capped with research studios focused on such topics as Global Informal Settlements, Smart Future Cities, Responsive Technologies & Environmental Sustainability.

In this example, students designed high performance buildings for smart city development around the world.
How well a building operates in concert with our environment is critical.

In this example, Kihong Ku studied responsive facades treatments with his students at Xi’an Jiaotong Liverpool University in Suzhou, China while visiting for the 2018-19 academic year.
Student Work
Research Projects

It is extremely important for future architects to utilize research as a fundamental design tool to better our built environment.

In this example, architecture and landscape architecture students joined forces to research the natural and built components of a site. Such research includes literal inventory as well as historiographical development.
Hand Drawing Versus Computer Drawing?

A common question we receive is which type of drawing does our program emphasize? The answer is both. We believe the ability to sketch, hand draw, diagram and build models are fundamental architectural skills just as much as being proficient in digital rendering. Programs we use:

- Microsoft Office
- Adobe Creative Suite
- AutoDesk (AutoCad & Revit)
- Rhinoceros
Theresa Chiarenza
CLASS OF 2020

Theresa will graduate with a BArch and minor in Historic Presentation. She is President of Jefferson’s AIAS chapter and received the 2019 Jefferson Student Leader of Innovation Award.

The Student Leader of Innovation Scholarship went to architecture student Theresa Chiarenza ’20 for her contributions to meet current and emerging social needs through innovation. Chiarenza played a leadership role with a team of 13 students, who collected oral histories and developed a cohesive exhibition about Jefferson’s Hassrick House, designed by Richard Neutra, that was presented to the public at the recent opening of the Center for the Preservation of Modernism.
Chris Harnish
ASSOCIATE PROFESSOR

BA in Environmental Studies and English Literature from Denison University
MArch from University of Oregon

Professor Harnish specializes in humanitarian architecture in Malawi and South Africa, examining the process of design and construction with the goal of positive culture and environmental impact in local communities. In 2016, Professor Harnish was awarded a Fulbright Teaching Scholar Fellowship for his proposal, “Equity, Sustainability and Resilience: Architecture as a Social Force in Humanitarian Development”.
TJ Burghart
MASS DESIGN GROUP
KIGALI, RWANDA

BArch with minor in Arch. History/Theory
CLASS OF 2014

AIAS Director Freedom by Design
Formerly AmeriCorps Construction Crew Leader at Habitat for Humanity Philadelphia Inc.

“I view architecture as a tool that has implications beyond its walls through the process. Spaces are where people come together to live. Details and moments of these spaces influence our daily experience and shape who we are. As a recent graduate, I continually seek to understand how we can improve our quality of life”.
Skylar Tibbits
ASSISTANT PROFESSOR
MASSACHUSETTS INSTITUTE OF TECHNOLOGY
CAMBRIDGE, MA

BArch with minor in Experimental Computation
CLASS OF 2008
M.S. Design Computation, MIT
M.S. Computer Science, MIT

Skylar Tibbits is a co-director and founder of the Self-Assembly Lab housed at MIT’s International Design Center. The Self-Assembly Lab focuses on self-assembly and programmable material technologies for novel manufacturing, products and construction processes.