

#### DREXEL UNIVERSITY

College of

Computing & Informatics







#### **College of Computing & Informatics**

- One of the most comprehensive academic units in the nation
  - Focal point for computing at Drexel
- Co-op: An experiential reflection of industry demand
- Tier 1 research institution and graduate programs

- Diverse student population and faculty
- Special commitment to Women in Technology
- Ranked #1 in "Innovative Impact"
- Ranked in top ten by CodeSignal for top tech talent
- Philadelphia: Be at the cultural center of it all





**60 Full Time Faculty** 

1,500 Undergraduate Students

2,400 Total Enrollment

237 International Students



#### **CCI** Women in Tech

"Networking with other women in tech fields has taught me a lot. It's great to learn other people's stories and discover how they got to be where they are right now."

- Minh Le, BS Computer Science '21







#### **Comprehensive Coverage of Computing and Informatics**

**Computer Science** 

Computing & Security
Technology

**Data Science** 

Software Engineering

**Information Systems** 

Computing Theory Programming

Computing Application
Client Needs

**Undeclared** 

Economics and Data Science\*\*

\*\**NEW* Joint program with Lebow



#### **Computer Science (BS or BA)**

#### Foundations, theory, and depth in specialty areas of the science of computing

- Complete required and elective courses from a variety of tracks:
  - Artificial Intelligence
  - Graphics and Interaction
  - Computer and Network Security
  - Game Design and Development

- Data Structures and Algorithms
- Numeric & Symbolic Computation
- Computer Architecture
- And Many More!

- Concentration in Computer Security
- Concentration in Game Programming and Development (GMPD)
- BS/MS Program available at 90 credits



## Game Programming & Development Concentration

- Combines software development, programming and design skills
- Joint Program with Westphal College of Media Arts & Design
- Two tracks included:
  - Game Development and Design
  - Student's Choice of Second Track



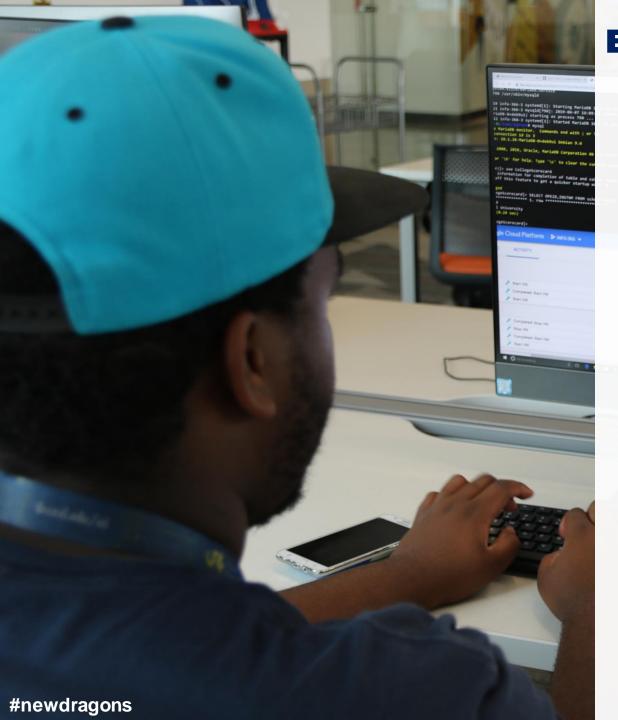
#### **BS in Software Engineering**

#### Software systems designed and built by teams

- Requirements, design, and development
- Development tools and techniques, product evolution, quality assurance, secure software
- Challenges:
  - Designing software that people enjoy using
  - Leading software development teams
  - Delivering high quality software products on time, within budget







## BS in Computing & Security Technology Drexel's Cybersecurity Degree

IT Infrastructure management, planning, operation, and security

- Core IT infrastructure areas: networks servers, databases, cloud and network security, ethical hacking, and more
- Concentrations in two areas
  - Computing Technology
  - Computing Security









#### **Drexel CyberCorps**

- \$4 million grant from U.S. Department of Homeland Security and the National Science Foundation to launch a CyberCorps® Mentoring and Scholarship Program
- Full-tuition scholarship for last 2.5 years at Drexel
- Builds a diverse cybersecurity workforce by recruiting, mentoring and retaining <u>all students</u> especially:
  - Veterans
  - Women
  - Underrepresented minorities





#### **BS in Information Systems**

## Technology applied to meet the information needs of individuals and organizations

- Bridging two worlds:
  - Interact with clients to understand their information needs
  - Work with software developers to implement solutions
- Focus on requirements and system design, database definition, user experience and human-computer interaction
- Minor included in the degree



#### **BS in Data Science**

## Discovery and visualization of information hidden in oceans of data

- Provide unique insights for science, business, or social good.
- Harness Big Data through data mining, data visualization, data curation, and exploratory data analysis.
- Develop insights about people's behavior and solve problems that require huge and varied datasets.
- Minor included in degree (typically business or natural science).



## **BS in Economics and Data Science (STEM- Joint Degree Between LCB and CCI)**

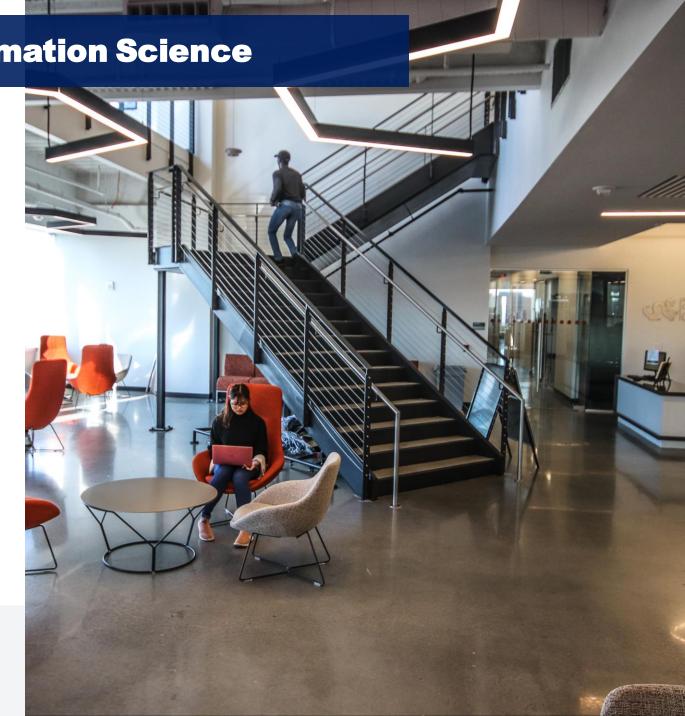
- One of only a handful of such programs at U.S. universities (e.g. Brown, Yale, Illinois, MIT)
- Benefits of a BS in Economics and Data Science:
  - Increasing digitization of our lives makes the ability to analyze, interpret and report on data increasingly valuable
  - Tools from data science allow students to manipulate and organize the increasingly large, varied and complex data that surround us
  - Insight from economics equips students to use data for forecasting or to establish causal relationships
- Course offerings include:
  - ECON 270 Using Big Data to Solve Economic and Social Problems
  - INFO 250 Information Visualization
- 39 credits of free electives make it easy to customize



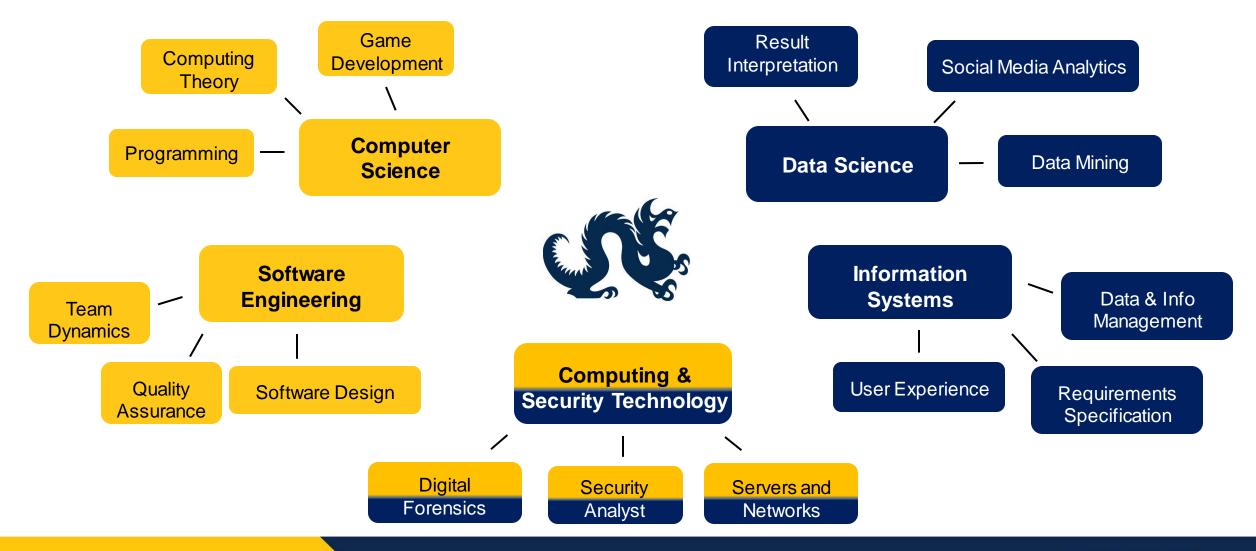
### Undeclared: Computing and Information Science

## Explore All of the CCI Majors in Greater Depth Freshmen Year, before you commit

- Pre-arrival: Complete math placement exam and interest survey
- Work closely with CCI advising to select courses
- Participate in additional sessions about majors and career paths
- Declare major by the end of second term
- Complete freshman year in a CCI major



#### **Comprehensive Coverage of Computing and Informatics**





#### First Year at CCI - What Will You Study?

- Complete placement exams prior to first term
- Introductory coursework in your major
- Introductory programming
- Introduction to Drexel student life via UNIV 101
  - Co-op and Civic Engagement
  - Builds community among students, faculty, and staff
- CCI first-year design sequence all CCI majors
  - Explore the basics of all the CCI majors
  - Work on a team project in an area you choose
- Math, English and (for some majors) Science









#### **Cooperative Education (Co-op)**

- Steinbright Career Development Center
- Gain diverse range of professional work experience
  - Up to 1 ½ years
- Co-op abroad







#### DREXEL CO-OPS VERSUS INTERNSHIPS





TYPICALLY LAST 2 - 3 MONTHS

MOST CO-OPS ARE PAID POSITIONS



MANY INTERNSHIPS ARE UNPAID

STUDENTS DO MAJOR-RELATED WORK WITHIN THE GUIDELINES OF THEIR ACADEMIC PROGRAM



WHILE POSITIVE, INTERNSHIPS ARE NOT NECESSARILY MAJOR-RELATED

CO-OPS ARE FOR ACADEMIC CREDIT AND PART OF A STUDENT'S OFFICIAL TRANSCRIPT



INTERNSHIPS ARE USUALLY NOT A REQUIRED PART OF THE ACADEMIC PROGRAM



#### Four Year, One Co-op Option

	FALL	WINTER	SPRING	SUMMER
Year One				•
Year Two	•	•	•	
Year Three			•	
Year Four	•	•		

#### **Five Year, Three Co-op Option**

	FALL	WINTER	SPRING	SUMMER
Year One	•	•	•	<b>•</b>
Year Two			•	
Year Three			•	
Year Four			•	•
Year Five				



Key:

Academic Term

Co-op Term

Vacation

#### CO-OP & CAREER FAST FACTS | COLLEGE OF COMPUTING & INFORMATICS

98.5%

OF COLLEGE OF COMPUTING & INFORMATICS (CCI) STUDENTS WERE EMPLOYED ON CO-OP IN 2018–19.

\$22

#### REPORTED MEDIAN HOURLY SALARY OF PAID CO-OPS FROM AY 2018–19

\$23 Computer Science

\$20 Computing & Security Technology

\$20 Data Science

\$21 Information Systems

\$24 Software Engineering

#### STUDENTS WORK HERE

Bentley Systems, Inc.

Bristol Myers Squibb Nation

Comcast Corporation

Day & Zimmermann, Inc.

Dell

DXC Technology

Facebook

Google

Lockheed Martin

National Board of Medical

Examiners

Oracle Primavera

SAP America

Security Risk Advisors

Susquehanna International

Group LLP

UNISYS

#### GO TO STEINBRIGHT AND GET TO WORK

Steinbright's powerful combination of co-op and career services is a Drexel advantage for job placement and beyond.

From the One-Year-Out Alumni Survey, graduating class of 2018:



of CCI graduates are working or enrolled in graduate or professional education.



of CCI co-op participants working full-time had received a job offer from a former co-op employer.

96%

of those working full-time were satisfied with their position.

90%

of those working full-time were satisfied with the level of responsibility at their position.

## Se**Semple** Sessions























DXC.technology

# CCI Community

- Professional Academic Advisors
- Peer Mentor Program
- Cyber Learning Center
- iCommons student lab

- CCI Residential Learning Community
- College social events each term
- Co-op and employer networking events
- Corporate Partners Program



#### **CCI Student Opportunities**

- Co-op Research Opportunities with Faculty
- The STAR (Students Tackling Advanced Research) Scholars Program
- Over 350 Student Organizations, many with Tech Focus, i.e. CyberDragons
- 18 Division 1 Teams
- 30 + Greek Letter Organizations
- Study Abroad





#### What's Next?

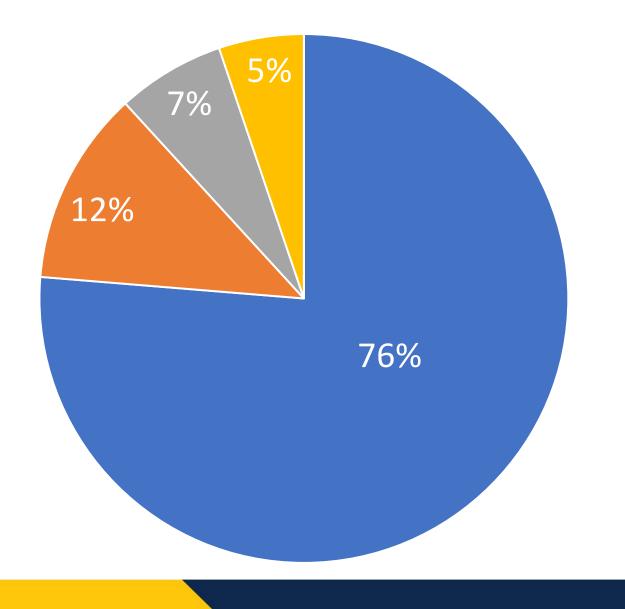
- May 1st: Deadline to confirm enrollment
- Late June/Early July: Complete placement exams
- September: Welcome Week and Move-in (Classes start on September 20<sup>th</sup>)

#### In the Meantime...

- Join the CCI Discord (Open to Confirmed Students)
- Connect with the CCI Dean's Ambassadors
- Check out the 3675 Market Virtual Tour
- Virtual Workshops
- CCI Digital Summer Camp
- Admitted Student Campus Tours







#### **STEM Job Growth Through 2028**

Computing

Engineering

■ Mathematics

Natural Sciences

Source: U.S. Bureau of Labor Statistics



#### **Speak To A Dean's Ambassador Today!**











drexelcci.info/ugda





















#### **Connect With Drexel CCI**

- facebook.com/drexelcci
- @drexel\_cci
- @drexelcci
- in drexelcci.info/linkedin
- youtube.com/drexelcci



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