NEW STUDENT ORIENTATION
Graduate Programs in Engineering & Software

Spring 2020
Welcome from the Deans

Dr. Don Weinkauf
Dean
School of Engineering

Dr. Bhabani Misra
Associate Dean
Graduate Programs in Engineering & Software
Agenda

Introductions
Who We Are
Classroom Environment
Academic Integrity
Academic Planning
Resources/Technology
Things to Know
Next Steps
Questions
Graduate Programs in Engineering

Engineering Program Directors

- Dr. John Abraham
  Mechanical Engineering
- Dr. Bob Bach
  Manufacturing Engineering
- Dr. Deb Besser
  Center for Engineering Education (CEE)
- Dr. John Fechter
  Technology Management
- Dr. Bob Monson
  Systems Engineering
- Dr. Greg Mowry
  Electrical Engineering
- Mike Winegar
  Regulatory Science
Graduate Programs in Software
Fulltime Faculty

Dr. Ron Chiang
George Washington University
Distributed Systems
Cloud Computing

Michael Dorin
Metropolitan State University
Software Engineering
Operating Systems

Frank Haug
University of St. Thomas
Database Management
Data Warehousing

Dr. Jordan Barlow
Indiana University
Database Management Systems

Dr. Chih Lai
Oregon State University
Data Mining, Healthcare Informatics, Machine Learning, Artificial Intelligence

Eric Level
University of Minnesota
Software Engineering
Object Technology

Dr. Abe Kazemzadeh
University of Southern California
Natural Language Processing

Dr. Manjeet Rege
Wayne State University
Data Analytics & Visualization, Machine Learning and Artificial Intelligence
Graduate Programs in Engineering & Software

Graduate Student Services Team

Crystal Conway
Program Manager
OSS 322
Student Advising

Laurie Dupont
Program Manager
OSS 322
Student Advising

Ryanna Jackson
Graduate Program Recruiter
OSS 301
Recruitment & Retention

Jana Studelska
Program Coordinator
OSS 301
Faculty Coordination & Professional Development

Keturah Ellis
Program Coordinator
OSS 301
Student Support & Event Coordination
Graduate Programs in Engineering & Software
Graduate Technology Team

Marius Tegomoh
Computing Resources

Jodea Johnson
Computing Resources

Michael Fink
Computer Resources
University of St. Thomas
Who We Are

• Founded in 1885
• Minnesota’s largest independent university
• Seven colleges & schools
  – College of Arts & Sciences
  – Opus College of Business
  – School of Divinity
  – School of Education
  – School of Engineering
  – School of Law
  – School of Social Work

Over 1,700 masters and bachelors students studying Software and Engineering at St. Thomas

1 in 6
UST students study in the School of Engineering

650 MS Software
300 MS Engr
700 BS Engr
200 BS Comp Sci

Currently, 1 in 9 undergrads at St. Thomas are enrolled in engineering.
Graduate Programs in Engineering
Master of Science & Certificate Programs

Master of Science:
• Electrical Engineering Concentrations
  • Communications & Signal Processing
  • Embedded Systems & Internet of Things (IoT)
  • Power Systems
  • Smart Grid & Electric Vehicles
• Manufacturing Engineering
• Mechanical Engineering
• Regulatory Science Engineering
• Systems Engineering
• Technology Management

Certificates:
• Manufacturing Systems
• Medical Device Development
• Power Electronics & Systems
• Technology Leadership
Graduate Programs in Software
Master of Science & Certificate Programs

Master of Science:
• Data Science
• Information Technology
• Software Engineering
• Software Management

Certificates:
• Artificial Intelligence
• Big Data
• Business Analysis

• Data Management
• Embedded Systems
• Enterprise Computing
• Internet of Things
• Healthcare Analytics
• Advanced Study (Post Masters)
## US Classroom Environment

<table>
<thead>
<tr>
<th>ASPECT</th>
<th>TEACHER-CENTERED</th>
<th>LEARNER-CENTERED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching methods</td>
<td>Lecture</td>
<td>Lecture, class discussions, application of theory</td>
</tr>
<tr>
<td>Instructor’s role</td>
<td>Directs learning process, source of knowledge, clarify and interpret written texts</td>
<td>Present content and facilitates dialogue</td>
</tr>
<tr>
<td>Learner’s role</td>
<td>Listen, take notes, read, memorize and demonstrate memorization through exams</td>
<td>Listen, take notes, read, think critically, express perspectives in class, participate in dialogues, demonstrate understanding</td>
</tr>
<tr>
<td>Who directs learning</td>
<td>Instructor</td>
<td>Instructor and student</td>
</tr>
<tr>
<td>Learning mode</td>
<td>Instructor impacts knowledge to students</td>
<td>Cooperative, participatory, interactive between instructor and students</td>
</tr>
</tbody>
</table>
# US Classroom Environment

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<th>ASPECT</th>
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<tbody>
<tr>
<td>Evaluation methods</td>
<td>Written and oral examinations</td>
<td>Written and oral examinations, presentations, class participations, papers, quizzes, group projects, classmates' evaluations</td>
</tr>
<tr>
<td>Who conducts evaluations</td>
<td>Instructors evaluate students</td>
<td>Instructors, students, classmates</td>
</tr>
<tr>
<td>Desired Outcomes</td>
<td>Memorize texts, absorb knowledge</td>
<td>Gain knowledge, apply concepts to new situations, use critical analytical skills</td>
</tr>
</tbody>
</table>
Major Differences
Graduate Coursework

Coursework involves:

• Assignments
• Projects
• Individual vs group work
• Class participation
• Examinations

Success depends on you

• Study concepts and information encompass material covered over the entire semester.
Major Differences
Graduate Grades

Final grades account for all course activity

- Individual faculty members are solely responsible for assigning your grade
- The following items may be used in calculating your grade
  - Assignments, attendance, class participation, exams, group projects
- D grades are not issued at the graduate level
- Numeric score to letter grade conversion
Major Differences
Graduate Grading Process

Grades

- Grades are posted 10 days after each term by the instructor
  - Final grades are entered into Murphy Online NOT your Canvas course

- 2.7 GPA is required to graduate
  - GPA is audited each term by the department

- Incomplete or “I” grade
  - Must have completed 80% of required coursework
  - Mitigating circumstances will be considered with appropriate documentation
  - Must complete all requirements by the next semester or the grade will automatically be changed to an F
University of St. Thomas
Academic Probation

All students who have a program grade point average (GPA) below 2.7 will be placed on academic probation.

- Any grade below a “B-” is regarded as unsatisfactory academic progress in a graduate program.
- Students on probation will receive a registration hold and are required to meet with the Associate Dean.
- When a student is placed on academic probation he or she will be required to meet with the Associate Dean. During the meeting the student and the Associate Dean will discuss the student’s academic performance, their suitability for the program, and possible strategies for improvement. The Associate Dean will send an e-mail to the student and their academic advisor outlining the results/strategies/agreements from that meeting.
- A student will remain on academic probation until their program GPA meets or exceeds the 2.7 threshold
University of St. Thomas
Academic Integrity Policy

• Honesty and trust among students and between students and faculty are essential for a strong, functioning academic community.

• Students are expected to do their own work on all academic assignments, examinations, projects and research/term papers.

• Academic dishonesty, whether cheating, plagiarism or some other form of dishonest conduct related to academic coursework and listed in the student policy handbook under "Discipline: Rules of Conduct" will automatically result in failure for the work involved. Academic dishonesty could also result in failure of the course and (in the event of a second incident of academic dishonesty suspension from the university.)
University of St. Thomas
Academic Integrity Policy

**Cheating** - Intentionally using or attempting to use unauthorized materials, information, or study aids in any academic exercise. The term academic exercise includes all forms of work submitted for credit.

**Fabrication** - Intentional and unauthorized falsification or invention of any information or citation in an academic exercise.

**Facilitating Academic Dishonesty** - Intentionally or knowingly helping or attempting to help another to violate a provision of the institutional code of academic integrity.
**Plagiarism** - The deliberate adoption or reproduction of ideas or words or statements of another person as one's own without acknowledgment. You commit plagiarism whenever you use a source in any way without indicating it’s source. If you quote anything at all, even a phrase, you must put quotation marks around it, or set it off from your text; if you summarize or paraphrase an author's words, you must clearly indicate where the summary or paraphrase begins and ends; if you use an author's idea, you must say that you are doing so. In every instance, you also must formally acknowledge the written source from which you took the material.

This includes material taken from the World Wide Web and other internet sources.
University of St. Thomas
Title IX Policy

• Title IX is a federal law prohibiting sex discrimination in education.
• St. Thomas is “committed to promoting and protecting the personal dignity and well-being of every member of our community.”
• **ALL students are REQUIRED** to view “Not Anymore”- an online interpersonal violence prevention and awareness program in Murphy Online.
• Failure to complete the training will prevent students from registering for future graduate courses.
• To complete the training, visit your student portal via Murphy Online under the student services tab.
Academic accommodations will be provided for qualified students with documented disabilities including, but not limited to, mental health diagnoses, learning disabilities, Attention Deficit Disorder, Autism, chronic medical conditions, visual, mobility, and hearing disabilities. Students are invited to contact the Disability Resources office about accommodations early in the semester.

Appointments can be made by calling 651-962-6315 or in person in Murray Herrick, room 110.

For more information, you can locate the Disability Resources on the St. Thomas website.
School of Engineering
Communication

Your St. Thomas email is the official communication method used by faculty and staff to provide important information to students.

1. Complete intent to enroll. Your intent to enroll creates all your electronic student accounts.
2. Create your own password.

When communicating, please include your nine digit St. Thomas ID number on all correspondence.

Note: Your St. Thomas email account is available up to 365 days after your last active term or post graduation.

For information technology support (ITS) call 651-962-6230 or email techdesk@stthomas.edu.
School of Engineering
Academic Planning

Create an academic plan using the following resources:
• Degree Evaluation
• ClassFinder* (Master Schedule)
• Program Director** (career advising/elective selection)
• Program Manager (Laurie & Crystal)
• Suggested Course Sequencing (website)

Note: course prerequisites, frequency of course offerings

Only take what you can handle
• Two courses per semester is considered full-time status at the graduate level!

STUDENTS MAY ONLY ATTEND CLASSES THEY ARE REGISTERED FOR!

*Master schedule is subject to change; finalized once registration opens
**Graduate Engineering only
Please review your degree evaluation via Murphy Online each term to ensure accuracy. You will find the following information in your degree evaluation:

- Program Requirements
  - ‘Additional Courses’ area
- GPA Required to Graduate
  - Program GPA of 2.7
- Waivers/Substitutions
- Academic Planning Notes
- Added Program/Certificate
School of Engineering
Graduate Waitlist Policy

Waitlist Policy

• Automated waitlist process. Students register themselves via Murphy Online in a desired waitlisted course. All students will receive a detailed communication regarding the waitlist process prior to registration.

• Instructors cannot modify the waitlist; they cannot give a student permission nor surpass a waitlist. The Graduate Student Services team manage waitlists. Students will be informed via email regarding his/her waitlisted status.

• Students who are on a waitlist are NOT registered and they may not attend class. Only students who are officially registered may attend the class. A student cannot receive credit for the course unless he/she is officially registered.
Student Resources
Canvas - Learning Management System

Allows students to:

• Access to course syllabi, handouts, assignments, recordings, slide presentations
• Engage in web-based learning activities, extending the classroom's boundaries
• Use of discussion boards to engage in discussion, prepare for a rigorous discussion in the classroom and to carry on the discussion after class
• Work in small groups using the virtual group space area
Students are responsible for course content in Canvas

- Access to Canvas course content is offered at the discretion of the individual faculty member
- Content is only available to actively enrolled students
- Access will close after the end of the term
- Students are responsible for saving syllabi and assignments outside of Canvas for future reference
Murphy Online
Academic Planning Wrap-up

• Registration Timeline:
  • Summer*/Fall semesters (early April)
  • J-term**/Spring semesters (early November)

• Registration Occurs via Murphy Online
  • Time Tickets (based on credits remaining)
  • Holds
  • Degree Evaluation
  • Create a Plan

• Classfinder
  • Master schedule is subject to change; finalized once registration opens

• Important Dates

• Business Office
  • billing questions
  • busofficesa@stthomas.edu

*Students are only permitted to register for one course during the summer session (one course = full time due to the condensed semester).

**Graduate Software courses are not offered during the J-term semester, only select Graduate Engineering courses.
Student Information
Frequently Asked Questions

• Adding a certificate
• Adding a program/major
• Changing a program/major
• Maximum credit
  • one semester at six credits required
  • nine credits allowed for scholarship sponsored students
• Course absences
• Project courses (ETLS 880/881)
• Program interruption

• Curricular Practical Training (CPT)/OPT
  • International students only
• Graduation application
  • See Laurie Dupont or Crystal Conway
• Computer & Network Information
• Billing
• Labs
• Parking
• Student ID Card
Student Resources
Career Development Center

Individualized Career Planning & Job Search

- Comprehensive Online Resources
  - Internship & Job Postings
  - Employer Research
  - Career Handouts & Webinars
- Group Seminars/Workshops
- Career Events (on and off-campus)
Next Steps Checklist

- Claim NetID (email address)
- Register for classes (via Murphy Online)
- Obtain your St. Thomas Student ID
  - ID Card Office: Murray Herrick 101 (open 8:30am-4pm)
- Pay Tuition:
  - Payments are due on the 19 of each month (Business Office)
- **Required:** Sexual Misconduct Training via Murphy Online
- Set up text/email alert: Murphy Online → Personal Information → Add/update emergency notifications
Next Steps

Graduate Programs in Engineering Handbook: https://www.stthomas.edu/engineering/graduate/policies/

Graduate Programs in Software Handbook: www.stthomas.edu/gradsoftware/current/policies/

Parking Services: Murphy online → Parking Services

- $75/semester for an evening permit (4pm to 2am) or $150/academic year
- Commuter Parking Options & Fees

Bookstore: online/on campus purchasing options www.stthomas.edu/campusstores/
Questions?

Email: soegradservices@stthomas.edu

Phone: 651-962-5500

Department Location: O’Shaughnessy Science Hall, OSS 301