

New CS/SE Graduate Student Orientation

Department of Computer Science

ERIK JONSSON SCHOOL OF ENGINEERING AND COMPUTER SCIENCE

Friday, March 29th, 2024

THE ORIENTATION BEGINS AT 8:30AM DALLAS, TX time (USA Central Daylights Saving time)



Agenda for Today

- □ Introduction Dr. Jorge Cobb (Associate Head Graduate Education CS Dept)
- □ Welcome Note Introduction by Dr. Ovidiu Daescu –Department Head
- □ CS Department Overview Dr. Jorge Cobb
- □ Graduate Advisors Computer Science Program Dr. Jorge Cobb
- □ MS CS/SE Degree Planning
- Areas of Study (Track)
 - Traditional Computer Science
 - Networks and Telecommunications
 - Intelligent Systems
 - Cyber Security
 - Systems
 - Data Science
 - Interactive Computing MS in Software Engineering Program
- GCS
- 🖵 Q&A !!!





Dr. Ovidiu Daescu Department Head Computer Science

Department of Computer Science

Jonsson School of Engineering and Computer Science



ECS and CS at UT Dallas

- UT Dallas
 - Founded in 1969 (celebrated 50th Anniversary)
 - 31,000+ students: CS the largest department with \sim 4,600 students.
 - https://www.utdallas.edu/about-us/
- CS @ UT Dallas
 - 1970s: Program founded as part of math sciences
 - 1986: Erik Jonsson School founded with CS + EE
 - Upper division BS CS started late 80s; Lower division in early 90s
 - Rapid growth in MS population in last decades
 - Significant growth in faculty and PhD population in the 2000s
 - Brand: producer of graduates with deep tech knowledge



- One of the largest departments in the country (3rd largest) and, also one of the best
- Fall 2020 student population ~4,600 students (3,600 BS, 800 MS, 160 PhD)
- 51 T/T faculty, 40+ Faculty of Instruction, 20+ part-time lecturers
- BS, MS, PhD degrees offered in CS, SE
- ~300 course-sections offered each semester (wide variety)
- ~ 1000 students graduate each year (more than 1% of US output of CS graduates)
- World renowned CS faculty: publish in top conferences & journals
- ~\$41 Million new research funding in the last three years
- 21st in LinkedIn ranking; #44 in USNWR global rank; #5 in UG AI (Best Value Colleges)
- 2019 csrankings.org: #5 SE, #6 in NLP, #7 AI



#21 Nationally in LinkedIn Ranking





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- Wide variety of research areas covered:
 - Cyber Security
 - Computer Systems
 - Software Engineering

- Intelligent Systems
- Computer Science Theory
- Computer Networking
- Data Science

Strategic areas of focus:

- Machine Learning/AI, Data Sci., Cyber Sec., SW Eng, IoT & Software Defined Network (SDN)
- Focus on Interdisciplinary/Multidisciplinary research
 - Computing Theory: Medical Image Proc., Comp. Bio., Mathematics
 - Computer Systems: Medicine, Rehabilitation, Image Proc., Art & Tech.
 - Cyber Security: Mgmt and Math Sci (risk management), political sci.
 - Intelligent Systems: Medicine, Speech processing



- 16+ CS faculty members hold the prestigious NSF CAREER award
- Numerous best paper awards & academic honors (many test-of-time awards as well):
 - Dr. Bhavani Thuraisingham, Fellow of the ACM and Fellow of NAI
 - Dr. Zygmunt Haas, Fellow of two European Societies
 - Dr. Latifur Khan, Fellow of the IEEE
 - Dr. Murat Kantarcioglu, Fellow AAAS and IEEE
- CS faculty are excellent teachers: they have won many awards
- Diverse student body:
 - #11 nationally in number of women students
 - #11 nationally in number of Hispanic students
 - #14 nationally in number of African American students



CS Department: Centers & Institutes









- Cyber Security Education & Research Institute (CSERI) (Director: Dr. Kevin Hamlen)
- Human Language Technology Institute (HLTRI) (Director: Dr. Sanda Harabagiu)
- Inst. for Interactive & Spatial Computing (UT DIISC) (Director: Dr. Balakrishnan Prabhakaran)
- Institute for Data Analytics (IDA) (Director: Mr. Bao Tran)
- Embedded Software Center (Director: Dr. Farokh Bastani)
- Center for Software Testing (Director: Dr. Eric Wong)
- iPerform: Center for Assistive Technology to Enhance Human Performance (Director: Dr. Ovidiu Daescu)
- Center for Machine Learning Research (Director: Dr. Sriraam Natarajan)
- Applied AI and Machine Learning Center (Director: Dr. Doug DeGroot)
- Center for CS Education and Outreach (Director: Dr. Jey Veerasamy)

Department of Computer Science



Opportunites for CS/SE Graduates



Department of Computer Science



- From a manufacturing economy to an information economy
- More things become automated, more and more software engineers needed
- With the Web and Mobile Apps becoming more pervasive, more people needed to develop them
- AI, Data Science, Machine Learning, Blockchain, IoT: new technologies gaining popularity
- This automation and pervasiveness of computing will continue to increase: THE FUTURE FOR CS/SE IS BRIGHT Great salaries: BS: \$70K-\$120K, MS: \$80K-\$150K, PhD: \$90K-\$200+K



Contacting the ISSO

Schedule an Appointment

Select an appointment type and select an available time slot to meet your advisor.

Appointments are available up to a week in advance.

Send a Message in iComet

The ISSO offers advising services online through iComet. You can send a message to an advisor and receive a response through your iComet Portal.

Contact the ISSO

At ISSOProspective@utdallas.edu for advising services

Call ISSO

For general information, call the ISSO at 972-883-4189 between **9 a.m. and 3 p.m**. The ISSO staff answering our phone lines are not immigration advisors.



GRADUATE DEGREE PLANNING SEMINAR Fall/Summer 2024

Department of Computer Science Erik Jonsson School of Engineering and Computer Science

The University of Texas at Dallas



Orientation/Degree Planning Seminar Overview

- Graduate Advisors Computer Science Program
- MS in CS, areas of study (Tracks) for
 - **Traditional Computer Science**
 - □ Networks and Telecommunications
 - □ Intelligent Systems
 - **Cyber Security**
 - **Systems**
 - **Data Science**
 - □ Interactive Computing
- MS in SE
- Annual Graduate Degree Planning Form submission
- Registration



Graduate Advisors







Prof. Jorge Cobb

Prof. Les Arnold

Prof. Pushpa Kumar Prof. Laurie Thompson



COMPUTER SCIENCE DEPARTMENT Graduate Advising Fall 2023

- Prof. Jorge Cobb cobb@utdallas.edu
- ECS 4.208 CS/SE PhD, including PhD with MS CS/SE MS with Thesis MS in CyberSec track MS in SE program
- Prof. Pushpa Kumar ECS 4.407 CSMS A F
 pkumar@utdallas.edu
- Prof. Laurie Thompson ECS 3.701 CSMS G Q
 laurie.thompson@utdallas.edu
- Prof. Les Arnold ECS 4.232 CSMS R Z gordon.arnold@utdallas.edu



- ➢ If you have already been admitted and need advice, please contact the advisor assigned to you.
- Please make sure to check the below link for latest advisor assignment, including office hours. These may change over time.

https://cs.utdallas.edu/education/graduate/advising/

In order to use your time most efficiently, appointments are strongly recommended. <u>Please email and request an appointment.</u>

DO NOT TELEPHONE US!

- 1. Regulations prohibit useful discussion as we cannot ensure your identity when contacted by telephone.
- 2. Your phone call is likely to interrupt instruction or meetings with students or colleagues



COMPUTER SCIENCE DEPARTMENT Graduate Studies Staff

Ms. Sydney SamuelECSS 3.903972-883-4216sydney.samuel@utdallas.eduA-L PhD, All MS Thesis, All PhD as MS

Mr. Doug HydeECSS 3.902972-883-6612dhyde@utdallas.eduM-Z PhD, All MS Thesis, All PhD as MS

Mr. Eric ModenECSS 3.908B972-883-4705eric.moden@utdallas.eduCS MS CYSEC track, All SE MS

Ms. Kirsten FowlerECSS 3.904972-883-4194kirsten.fowler@utdallas.eduCS MS A-H

 Ms Kiara Hackett
 ECSS 3.908 972-883-4206
 kxh230013@utdallas.edu

 CS MS I-Q
 ECSS 3.908 972-883-4206
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Ms. Emily Lenart-DonaldsonECSS 3.905972-883-4278eldonaldson@utdallas.eduCS MS R-Z

Again, please visit <u>https://cs.utdallas.edu/education/graduate/advising/</u> for the latest assignments.

The staff members are **NOT** Graduate **ADVISORS**. For any questions on classes, choosing a degree plan.. etc, contact your Graduate Advisor.

Department of Computer Science



- Master of Science in Computer Science (33 credit hours)
 - Traditional Computer Science
 - Networking and Telecommunications
 - Intelligent systems
 - Cyber Security
 - Systems track
 - Data Science
 - Interactive Computing
- Master of Science in Software Engineering (33 credit hours)
- Doctor of Philosophy (75 credit hours beyond B.S. degree) in
 - Computer Science
 - Software Engineering
- Offered jointly by CS and ECE Departments
 - Computer Engineering & Telecommunications Engineering (advising done by ECE Department)

Department of Computer Science



- The graduate catalog is your official guide to degree plan requirements, become familiar with it!
 - https://catalog.utdallas.edu
 - https://catalog.utdallas.edu/2023/graduate/programs/ecs/computer-science
- > This orientation is a summary, the **official rule** is the catalog

Master of Science Degree Plan

- > Department of Computer Science MS Requirements
 - \succ Five Core Courses from one of the tracks.
 - \succ We will go over the list of core courses for each track in a moment.
 - \geq A minimum of 18 hours of approved electives.
 - \geq All requirements including transfer credit must be completed in a sixyear window.
 - > GPA requirements:
 - > Core courses cumulative GPA \geq 3.19
 - \blacktriangleright Elective courses cumulative GPA ≥ 3.00
 - \triangleright Overall (including non CS/SE courses) graduate cumulative GPA \geq 3.00

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- Minimum of 18 semester credit hours
 - At least 12 semester credit hours of 6000/7000 level elective CS courses, that could include 6 semester credit hours of thesis with approval of a graduate advisor.
 - Stay away from service courses "for practitioners" in the title (.g. CS 6303, 6305)
- In addition, at least 6 semester credit hours from among:
 - <u>ECSC 5177</u> (maximum three semester credit hours)
 - CS 6000/7000 level elective courses
 - only one of <u>CS 5333</u>, <u>CS 5343</u> or <u>CS 5348</u>; (only if you took the course at UTD)
- A minimum grade point average of 3.0 is required for elective courses.
- Approved electives must be taken to make a minimum of 33 semester credit hours.



Master of Science Degree Plan

- If core GPA is above 3.00 but below 3.19, <u>a seventh elective is</u> required in the degree plan.
- If core or elective GPA is below 3.00, one or more courses must be repeated.
- Any course can be repeated only once and a maximum of three courses can be repeated in a degree plan.
- ➢ If a student repeats a course, the new grade will replace the earlier grade; both will appear in the transcript.
- Please check the graduate catalog for all other policies and procedures. http://catalog.utdallas.edu/2023/graduate/home

Matriculating Fast Track Students

Former Fast Track Students:

- Courses Taken as Option A (Undergrad only) cannot be applied to your Masters program.
- Courses Taken as Option B (Fast Track) or C (Grad only)
 - ➢ Are <u>ALL</u> treated as Transfer Credits*
 - ➢ All course grades in Option B or C <u>WILL</u> affect your GPA
- ➢ Fast Track Admits, like all other students, have assigned Advisors and DPEs by last name alpha, Track, and/or Thesis option.

DALLAS



Admission Letter Sample



THE UNIVERSITY OF TEXAS AT DALLAS

Office of Enrollment Services HH10 800 W CAMPBELL RD RICHARDSON TX 75080-3021 (972) 883-2270 1-800-889-2443 FAX (972) 883-6803 www.utdallas.edu email: interest@utdallas.edu



Congratulations on your admission to the University of Texas at Dallas! The UT Dallas Committee on Graduate Studies congratulates you on your admission to the graduate program in Computer Science for the Fall-2008 semester. We share your excitement as you begin this new stage in your education. At UT Dallas, we promise you a welcoming environment, intellectual challenges, great faculty in your field of study, and a diverse and stimulating University family.

Please note that all required supporting documents must be received before you will be able to register for classes. You must contact the program to which you have been admitted, as each program has additional conditions that must be met before you can register. For contact information, please visit <u>http://utdallas.edu/enroll/graduateadvisors</u>

We want to ensure that as a newly admitted student you are aware of the next steps you should complete to prepare for your enrollment at UT Dallas. For help with this process and to confirm your intention to enroll visit <u>http://www.utdallas.edu/enroll/admit/graduate</u>. Should you need to defer you admission for any reason please contact the Associate Dean for the program to which you were admitted.

Your foreign tuition status has been determined based on the information that you provided on your admission application. If you have any questions regarding your residency status, please contact the program to which you have been admitted for more information.

The graduate experience at UT Dallas is unique and exceptional. Our faculty and staff look forward to welcoming you to campus.

Sincerely,

Dean of the Erik Jonsson School of Engineering and Computer Science

To contact the School of Engineering and Computer Science, please call 972-883-2974. You may also find important information on our web site at http://www.ecs.utdallas.edu.

cc: file _____ ECS CS F

AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION UNIVERSITY



Admission Requirements

- Your official admissions letter may state any required <u>leveling courses</u> recommended by the admissions committee.
- In case you have not seen your leveling courses assigned to you or missed it in your emails, contact a staff member.
- You are responsible for any leveling course required for your Degree Plan (track) and <u>also for any course you</u> <u>choose.</u>

Admission Requirements

- Students from Non CS/Related backgrounds MUST complete or be recognized upon admission the following MINIMUM leveling courses:
 - CS 5303 (Basic Computer Programming)
 - ≻ CS 5330 (CS II: Computer Architecture)
 - ≻CS 5333 (Discrete Structures),
 - ≻CS 5343 (Data Structures & Algorithm Analysis) and
 - ≻CS 5348 (Operating Systems).

> Other leveling courses are necessary according to your track.

- You must COMPLETE your assigned 5000 level courses applicable to your degree plan in the first year of study at UTD.
- Supported students (RA/TA) must enroll in 9 graduate hours

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- If you are choosing CyberSecurity or SE degree plan, you must complete the required core and leveling courses in the first three semesters. Otherwise, you may not graduate on time.
 - These two degree plans require some careful planning and selection of courses each semester.
- ➤ A general recommendation for all the students is to complete the core courses in your track in the first three semesters.

Do not leave any core course to be completed in the graduating semester, especially in a summer semester.



Grading System

- Letter grades A, A-, B+, B, B-, C+, C and F are used in grading graduate courses.
- GPA representation for the grades are as follows;

A	4.00	C+	2.33
A-	3.67	С	2.00
B+	3.33	F	0.00
В	3.00		
B-	2.67*		

* Please note B- is less than 3.00



- All Important deadlines and dates are kept current in the Academic Calendar online.
 - It is important that you review and know these dates (each semester):
 - Enrollment

• The dates update constantly.

- Payment
- Apply for graduation Confi
 - PhD/MS-Thesis Final Defense
- <u>Confirm the date ONLINE not on paper.</u>



Enrolling, Dropping or Swapping

• The last day in Fall 24 to add/swap courses is Monday August 26 (with a late fee!)

• <u>**DO NOT**</u> drop classes online on the last day. If classes fill up, you may be under-enrolled by the last day to add/swap! Use SWAP instead of drop, or send us an add/drop form.

• When in doubt meet with a CS Grad Advisor.



Official Academic Calendar Fall 2024

Note: All offices are closed on Saturdays and Sundays. All transactions must occur online. All email correspondence will be sent to UTD email address

Classes Begin

Full-term session	Monday, August 19
1st 8-week session	Monday, August 19
2nd 8-week session	Monday, October 14

Web Registration

Enrollment appointments available online Monday, March 25 All students should check their enrollment appointment details in Orion for the date and time they can begin registering. Schedule Planner Available Monday, March 25 Online add/swap ends Monday, August 26

Last Day for Re-admission/Re-entry .. Friday, August 9

Last Enrollment from Waitlist..... Friday, August 16

Last Day for Regular Registration

Full-term session	Thursday, August 15
1st 8-week session	Thursday, August 15
2nd 8-week session	Thursday, October 10

Late Registration and Last Day to Add/Swap

If you register or add during late registration, payment is due the same day you register. You will be assessed a minimum \$100 late registration fee. See Bursar's Office information.

Full-term session Friday, Aug.	16 - Monday, Aug. 26
1st 8-week session Friday, Aug.	16 - Monday, Aug. 26
2nd 8-week session Friday, Oct.	11 - Monday, Oct. 21

Census Day (State Reporting Date) Last Day to Drop

Full-term session	. Wednesday September 4
1st 8-week session	Monday, August 26
2nd 8-week session	Monday, October 21

Drop/Withdrawal Deadlines

Please check Cornet calendar for signature procedures.

Full-Term Session

Last day to drop a class without a "W" Wed., Sept. 4
Undergraduate Courses
Approval required Thur, Sept. 5 – Tues., Nov. 5
Graduate Courses
Withdrawal Ends Tuesday, November 5

1st 8-Week Session

Last day to drop a class without a "W" Mon., Aug. 26 Undergraduate Courses Approval required Tues., Aug. 27 - Mon., Sept 23 Graduate Courses Withdrawal Ends...... Monday, September 23

2nd 8-Week Session Last day to drop a class with

Undergraduate Courses

Approval required..... Tues., Oct. 22 - Thurs., Nov. 21

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Last Day of Classes (Not including final exams)

Full-term session	Thursday, December 5
1st 8-week session	Sunday, October 6
2nd 8-week session	Thursday, December 5

Reading Days (Study days prior to final exams)

Full-term & 2nd 8-week sessions only......Friday, December 6

Final Exams

Full-term session	. Saturday, Dec. 7 – Friday, Dec.	13
1st 8-week session	Monday, Oct. 7 - Saturday, Oct.	12
2nd 8-week session	. Saturday, Dec. 7 - Friday, Dec.	13

Mid-Term Grades Due and Viewable Online

All midterm grades must be submitted online. Midterm (undergraduate courses only) Saturday, Oct. 12

Final Grading Period

All grades must be received by Wednesday, December 18. Viewable online after posting begins Monday, December 16. 1st 8-week session Monday, Oct. 7 - Saturday, Oct. 12 2nd 8-week session Saturday, Dec. 7 - Wednesday, Dec. 18

Graduation/Commencement (All Fall 2024 Sessions)

The following deadlines must be met by the dates listed and require visitation to the Office of Graduate Education (OGE) website graduate.utdallas.edu:

Last day to request scheduling of	
final doctoral oral examination	TBA
Last day to conduct	
final doctoral exam	TBA
Final day to upload final version of	
dissertation for review by OGS	TBA
Final day to receive approval of final	
version of dissertation by OGS	TBA
Final day to upload final version of	
master's thesis for review by OGS	TBA
Final day to receive approval of final	
version of master's thesis by OGS	TBA

University Closings

95%

	Monday, September	2
V sd	y, Nov. 28 – Sunday, Dec.	1
1	Mon., Dec. 23 – Wed, Jan.	1

Monday Nov 25 - Wednesday Nov 27

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Department of Computer Scien

Fall break

Totallas emporary Appeal for 5000 Leveling Courses

- ➤ To take a CS 6000 level graduate course and you have a prerequisite leveling course listed in your admit letter:
 - ➢ Have a transcript showing that you have completed the leveling courses in your undergraduate work
 - Petition the Graduate Advisor for approval to enroll in the CS 6000 level course.
 - > PLS NOTE THE LEVELING COURSE WILL NOT BE WAIVED AT THAT MOMENT BY ANY ADVISOR.

YOU MUST APPLY SEPARATELY IN OCTOBER TO WAIVE YOUR LEVELING COURSES (no guarantee it will be approved then)

≻Refer to the UTD Graduate Catalog for Leveling courses.



Transfer/Waiver of Courses

Transfer/Waiver seminars are scheduled in the second month of each long semester.

Date and time will be announced mid-late September via UTD email.

Tentative Degree Plan of Study

- Sample degree plans in https://cs.utdallas.edu/education/graduate/ (scroll to bottom)
- Select your area of Computer Science Concentration:
 - Traditional Computer Science
 - Networks and Telecommunications
 - Intelligent Systems
 - Cyber Security
 - Systems Track
 - Data Science
 - Interactive Computing
 - Software Engineering (Must be SE_MS or SE_DR program)
- Leveling Courses
 - Cross out any not listed in your Admission Letter
- Complete Core, Elective, and Leveling Courses
 - Enter the course name, number, grade, and semester
 - 22F = Fall 2022
 - 23S = Spring 2023
 - 23U =Summer 2023

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- Review your Grade Point Average (GPA) in:
 - Core Courses
 - (need 3.19 over the five graduate courses)
 - Elective 6000 level courses
 - (need 3.00 over all)
 - Overall 3.00 or better GPA in UTD Graduate courses
 - Complete any Leveling Courses required by track.
- Submit your AOP to your Graduate Studies Staff member by the first week of classes. This is a University requirement.

> Otherwise, you will have an enrollment plan hold.

We suggest you review your Tentative Degree Plan with a Graduate Advisor at least once a year.



- Repeat this process at least once every academic year or when changing your track.
- Plan your graduation by discussing the degree plan with an advisor. Must visit with an advisor one semester prior to Graduation.
- ➢ CS department offers each core course at least once every academic year.
 - Students should plan their schedule carefully.



Traditional Computer Science Plan

Core Courses - Traditional		
CS 6363	Computer Algorithms	
CS 6378	Advanced Operating Systems	
CS 6390	Advanced Computer Networks	
Any two of the following ;		
CS 6353	Compiler Construction	
CS 6360	Database Design	
CS 6371	Structure and Design of Programming Languages	



Data Science Plan

Core Courses – Data Science		
CS 6313	Statistical Methods for Data Science	
CS 6350	Introduction to Big Data Analytics	
CS 6363	Design & Analysis of Comp. Algorithms	
CS 6375	Machine Learning	
Any one of the following:		
	Any one of the following:	
CS 6301	Special Topic: Social Network Analytics	
CS 6301 CS 6320	Any one of the following: Special Topic: Social Network Analytics Natural Language Processing	
CS 6301 CS 6320 CS 6327	Any one of the following: Special Topic: Social Network Analytics Natural Language Processing Video Analytics	
CS 6301 CS 6320 CS 6327 CS 6347	Any one of the following: Special Topic: Social Network Analytics Natural Language Processing Video Analytics Statistics in AI and Machine Learning	

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Cyber Security Plan

Core Courses – Cyber Security		
CS 6324	Information Security	
CS 6363	Design & Analysis of Computer Algorithms	
CS 6378	Advanced Operating Systems	
Any two of the following:		
CS 6332	System Security & Malicious Code Analysis	
CS 6348	Data and Application Security	
CS 6349	Network Security	
CS 6377	Introduction to Cryptography	

Must also complete 2 CyS approved Electives.

Eric Moden will be your DPE and Dr. Jorge Cobb your Academic Advisor

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Core Courses - Intelligent Systems		
CS 6320	Natural Language Processing	
CS 6363	Design & Analysis of Computer Algorithms	
CS 6364	Artificial Intelligence	
CS 6375	Neural Nets and Machine Learning	
	Plus one of the following	
CS 6360	Database Design	
CS 6378	Advanced Operating Systems	

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Interactive Computing Plan

Core Courses – Interactive Computing		
CS 6326	Human Computer Interaction	
CS 6363	Design & Analysis of Computer Algorithms	
CS 6319	Computational Geometry	
Any two of the following:		
CS 6323	Computer Animation & Gaming	
CS 6328	Modeling and Simulation	
CS 6331	Multimedia Systems	
CS 6334	Virtual Reality	
CS 6366	Computer Graphics	

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Core Courses - Networks		
CS 6352	Performance of Computer Systems & Networks	
CS 6363	Computer Algorithms	
CS 6378	Advanced Operating Systems	
CS 6385	Telecommunication Networks	
CS 6390	Advanced Computer Networks	



Systems Degree Plan

Core Courses – Systems		
CS 6304	Computer Architecture	
CS 6363	Computer Algorithms	
CS 6378	Advanced Operating Systems	
CS 6396	Real Time Systems	
Any one of the following:		
CS 6349	Network Security	
CS 6376	Parallel Processing	
CS 6380	Distributed Systems	
CS 6397	Synthesis and Opt of High Perf. Systems	



Core Courses - Software Engineering	
SE 6329*	Object Oriented Software Engineering
SE 6361	Advanced Requirements Engineering
SE 6362	Advanced Software Architecture and Design
SE 6367	Software Testing, Validation & Verification
SE 6387	Advanced Software Engineering Project

 Credit will be given for only **one** of the following courses if students take them together to satisfy Computer Science and Software Engineering degree plan requirements:
 SE 6329 Object-Oriented Software Engineering, and **CS 6359** Object-Oriented Analysis and Design (cannot be used on SE degree plan)



Each track has a set of required leveling courses.

- These courses must be waived upon admission (i.e., not listed in your admission's letter), waived during a waver/transfer session, or be taken at UTD.
- > In addition,
 - ➤Any levelling course that is a prerequisite for an elective that you choose to take must be also be waived upon admission (i.e., not listed in your admission's letter), waived during a waver/transfer session, or be taken at UTD
- > A levelling course that is not required for your track nor for your chosen electives does not need to be taken/waived



Leveling Courses

Leveling	Courses	for all	Degree I	Plans

CS 5303	Computer Science I
CS 5330	Computer Science II
CS 5333	Discrete Structures
CS 5343	Algorithm Analysis & Data Structures
CS 5348	Operating Systems Concepts



Traditional

CS 5349	Automata Theory *
CS 5390	Computer Networks

Software Engineering

CS 5354 | Software Engineering

Networks	
CS 3341	Probability & Statistics
CS 5390	Computer Networks

Cyber Security

CS 5390 Computer Networks

Data Science

CS 3341 Probability & Statistics

* Only for CS 6353-Compiler Construction & CS 6371-Structure & Design of Programming Languages



Graduate Certificate in Cyber Defense

Students Seeking this certificate must start the process at least one semester (at the beginning) prior to graduating semester. You apply for the certificate online (like you applied for the MS or PhD). Your DPE will set you eligible to apply for graduation of the certificate if you meet requirements. You must apply to graduate (it is not automatic)

You must apply BEFORE you meet all the requirements

Once admitted to the Cyber Defense certificate program:

To get the certificate you must complete the following five courses with a Cumulative GPA of 3.2 or better

- CS 6324 Information Security
- CS 6348 Data and Application Security
- CS 6349 Network Security
- CS 6332 Systems Security and Malicious Code Analysis (recent change)
- CS 6378 Advanced Operating Systems

The conferral date and program will appear on your transcript.

This Certificate is endorsed by NSA



Cyber Ops Transcript Notation

Students Seeking Cyber Ops Notation on transcript must start the process one semester (at the beginning) prior to graduating semester. After the degree plan audit with your advisor, you would send your email request to your DPE for Cyber Op Notation.

Requirement: Must complete 6 core and 2 electives courses from the lists below:

Core Courses

- CS 6324 Information Security
- CS 6332 System Security & Malicious Code Analysis
- CS 6340 Wireless Networks
- CS 6349 Network Security
- CS 6363 Design & Analysis of Computer Algorithms
- CS 6390 Advanced Computer Networks

Elective Courses

- CS 6301 Developing and Securing the Cloud, Edge and IoT
- CS 6335 Language Based Security
- CS 6348 Data and Applications Security
- CS 6377 Intro to Cryptography
- CS 6378 Advanced Operating Systems
- CS 4397 Embedded Computer Systems
- CS 4398 Digital Forensics
 *

CS 4397, and/or CS 4398 *will not* count as an

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elective in any CS/SE graduate degree plan.

If you complete the work as detailed above AND Apply to have it added; a note will be added to your transcript.

This Note is endorsed by the NSA

Department of Computer Science

Policies and Procedures

Students:

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- must have a signed acknowledgement of policies (AOP) in the file before end of first semester (even earlier or an enrollment hold will be placed).
- \succ must be in the correct program the semester prior to graduation.
- visit with an academic advisor annually for a degree plan audit and the SEMESTER prior to graduation for the grad audit.
- Changing from CS_MSCS to SE_MS or from SE_MS to CS_MSCS requires a <u>New Application</u>.
- Changing from CS_DR to SE_DR or from SE_DR to CS_DR requires a <u>New Application</u>.



- The Master's Thesis option is available in all areas of study in the Computer Science Program.
- The Master's Thesis is recommended for a graduate student who is considering further graduate studies towards a Doctor of Philosophy program.
- A Master of Science Thesis replaces two 6000 level electives (minimum of six credit hours)
- The Master's Thesis provides an opportunity for your initial research activities
- For more information, visit the Associate Head for Graduate Education.



Once a student is enrolled in thesis, dissertation, or the third practicum, unless a leave of absence has been granted, that student must maintain continuous enrollment (not necessarily for thesis, dissertation, or practicum) of at least three semester hours during consecutive long semesters until the final approved copy of the manuscript has been deposited in the Office of the Dean of Graduate Studies.

Information for International Students

- Students participating in the Industrial Practice Program must enroll in a 1 credit hour course. Students signing up for CPT please contact the Jonsson School Career Services.
- The USCIS has determined that F1 students who are graduating may take only the courses required for graduation/ course completion in their graduating semester.
- Students must get a new Sevis I-20 if they change majors or degree level. The new Sevis I-20 must be signed by the first day of class in the new academic program.
- For all questions regarding visa/OPT/reduced enrollment, please talk to the International Student Advisor at the ISSO.



Information for International Students Can I Delay Graduation?

As an F or J visa holder, the US Citizenship and Immigration Service requires that you make **progress towards your degree** to maintain your immigration status. Additionally, the federal regulation :

"If the student is not required to take any additional courses to satisfy the requirements for completion ... the student is considered to have completed the course of study and must take action to maintain status. Such action may include application for OPT, application for change of status or departure from the U.S."

Please be aware that postponing your graduation can negatively affect your immigration status now and in the future. Postponing graduation can be defined as any of the following:

- Taking any unnecessary classes
- Changing tracks within an academic program for the purpose of delaying graduation

Students with questions need to contact their International Student Advisor at the 972-883-4189 or in person at the ISSO, SSB 3.400

AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION UNIVERSITY



Honor Code

Academic Integrity

The faculty expects from its students a high level of responsibility and academic honesty. As a general rule, scholastic dishonesty involves one of the following acts: cheating, plagiarism, collusion and/or falsifying academic records. Students suspected of academic dishonesty are subject to disciplinary proceedings. Plagiarism, especially from the web, from portions of papers for other classes, and from any other source is unacceptable and will be dealt with under the university's policy on plagiarism (see general catalog for details).



- Early registration for Spring 2025 semester starts Nov. 2024.
- Early registration for Fall and Summer 2024 starts in April 2024.
- Enrollment appointments are placed on your Orion account based on earned hours, and is randomized. It is determined by the Registrar.
 - It's your responsibility to check out the schedule online and register in classes.
- If you don't have any holds, you'll be able to enroll in classes online. We strongly recommend not to enroll in more than two core courses from any track. Also, don't enroll in three courses which are scheduled on same days.
- Email: The university requires all official student email correspondence be sent only to a student's U.T. Dallas email address and that faculty and staff consider email from students official only if it originates from a UTD student account.



- FERPA will not allow another student to represent you for enrollment. You should not accept another persons enrollment sheet and represent them.
- Nothing can be done by PHONE... Please DO NOT call...
 Use UTD email for official business.
- Students who go on academic probation (< 3.0 GPA) can enroll in classes ONLY after grades are obtained for the currently enrolled semester and after a visit with the Associate Head for Graduate Education.

Enrollment Holds

- Enrollment holds (due to new student orientation) will be removed early next week
- If you have a "cannot register online" please contact your assigned graduate support staff.



- Graduates of Computer Science (GCS) is a student body composed of graduate students that organizes various events for CS graduate students such as hackathons and seminars.
- All graduate students are free to reach out to us regarding any query that they have. We encourage you to join GCS and take part in its activities.
- Please check out our page on Facebook to know more about us. You can access the page using this QR code.





Jonsson Career Services (JCS)

Connect with Jonsson Career Services! ECS Student Services Suite (ECSS 2.502) jonssonschooljobs@utdallas.edu LinkedIn: @jonssoncareerservices

Services:

Technical Resume Critiques

- Professional Development
- Interviewing Preparation
- ➢ Job Search Strategies

- ➤CPT Authorization
- ➢Internship Class

Check Out JCS Upcoming Events

https://utd.link/jcsevents

Scan to access events list



Jonsson S

Department of Computer Science



Schedule Planner

SCHEDULE PLANNER





Department of Computer Science



- YOU MUST APLLY FOR GRADUATION IN ORION in the first week of your graduating semester.
- The process is NOT automatic, NOR is it done by advisors. YOU have to apply to graduate in Orion.
- There are firm deadlines for applying are in OGE's webpage https://graduate.utdallas.edu/current_students/deadlines/
- If you miss the deadlines, you will NOT graduate that semester.



For more information:

Visit cs.utdallas.edu/news/

Contact your academic advisor

https://cs.utdallas.edu/education/graduate-studies/graduate-advising/

Department of Computer Science







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