Department of Computer Science

ERIK JONSSON SCHOOL OF ENGINEERING AND COMPUTER SCIENCE

Wednesday, June 2nd, 2021

THE ORIENTATION BEGINS AT 8:30AM DALLAS, TX time
PLEASE MUTE YOUR MICROPHONES
Agenda for Today

- Introduction – Shyam Karrah (Director of Graduate Student Services CS Dept)
- UTD Welcome Note – Introduction by Dr. D.T. Huynh
- CS Department Overview – Dr. D.T. Huynh- Interim Department Head
- Visa Issues - ISSO Office
- Why Study Cyber Security in the CS department at UTD – Dr. Kamil Sarac
- Graduate Advisors Computer Science Program – Shyam Karrah
- MS CS/SE Degree Planning
- Areas of Study (Track)
  - Traditional Computer Science
  - Networks and Telecommunications
  - Intelligent Systems
  - Information Assurance
  - Systems
  - Data Science
  - Interactive Computing
- MS in Software Engineering Program
- GCS
- Q&A !!!
Computer Science Department

Dr. Ovidiu Daescu  
Associate Department Head

Dr. Jorge Cobb  
Director of PhD Studies
ECS and CS at UT Dallas

• UT Dallas
  – Founded in 1969 (celebrating 50th Anniversary)
  – #21 in Times of London ranking of Universities younger than 50
  – #1 in US among Universities younger than 50
  – 29,000+ students: CS the largest department with ~ 4,600 students.
  – Focus on computing, engineering, tech, science & management

• 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
Computer Science at UTD

- 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 Senior Lecturers, 20+ part-time lecturers
- BS, MS, PhD degrees offered in CS, SE, CE, TE, Data Sci.
- ~300 course-sections offered each semester (wide variety)
- ~1000 students graduated each year (more than 1% of US output of CS graduates)
- World renowned CS faculty: publish in top conferences & journals
- ~$9 Million in annual research expenditures (37th in USA)
- 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
<table>
<thead>
<tr>
<th>Rank</th>
<th>University</th>
<th>Area</th>
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<tr>
<td>1</td>
<td>Carnegie Mellon University</td>
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<td>Caltech</td>
<td>Greater Los Angeles Area</td>
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<td>3</td>
<td>Cornell University</td>
<td>Ithaca, New York Area</td>
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<td>Massachusetts Institute of Technology</td>
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<td>New Jersey University</td>
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<td>University of California, Berkeley</td>
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<td>Durham, North Carolina Area</td>
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<td>University of Michigan</td>
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<td>Stanford University</td>
<td>San Francisco Bay Area</td>
<td>191,400</td>
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<td>11</td>
<td>Rice University</td>
<td>Houston, Texas Area</td>
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<td>University of Pennsylvania</td>
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<td>125,200</td>
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<td>University of Arizona</td>
<td>Tucson, Arizona Area</td>
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<td>Harvey Mudd College</td>
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<td>15</td>
<td>The University of Texas at Dallas</td>
<td>Dallas/Fort Worth Area</td>
<td>61,400</td>
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</table>
csrankings.org ranking

- Ranked #6 in NLP + AI (2009-2019)
- Ranked #41 overall (2019-2020)

- Ranked #24 in Top Colleges Providing Cyber Security Programs

  #5 in the nation for Undergraduate Education in AI (Best Value Colleges)
  Just behind MIT, CMU, UC Berkeley, Georgia Tech
  BS SE ranked #9 in the country by “Best Computer Science Schools”
Excellence in Research

• 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 Engg, IoT & Software Defined Network (SDN)

• Focus on Interdisciplinary/Multidisciplinary research
  - Computer Systems: Medicine, Rehabilitation, Image Proc., Art & Tech.
  - Cyber Security: Mgmt and Math Sci (risk management), political sci.
  - Intelligent Systems: Medicine, Speech processing
CS Accomplishments

- 13 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. Kevin Hamlen sets Spaceflight Simulation Game world record
  - Dr. Murat Kantarcioglu, Fellow AAAS
- 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. Thuraisingham)
- Human Language Technology Institute (HLTRI)  
  (Director: Dr. Sanda Harabagiu)
- Inst. for Interactive & Spatial Computing (UT DIISC)  
  (Director: Dr. B. Prabhakaran)
- Institute for Data Analytics (IDA)  
  (Director: Mr. Bao Tran)
- Net-centric Software Center  
  (Director: Dr. Farokh Bastani)
- Center for Software Testing  
  (Director: Dr. Eric Wong)
- iPerform: Center for Assistive Technology  
  (Director: Dr. Ovidiu Daescu)
- Center for Machine Learning Research  
  (Director: Dr. Sriraam Natarajan)
- Applied AI Research Center  
  (Director: Doug DeGroot)
- Center for CS Education and Outreach  
  (Director: Dr. Jey Veerasamy)
Many of these jobs are right here in DFW!
Opportunities for CS/SE Graduates

Annual jobs available vs. degrees granted

- Computer Science
- Engineering
- Life Sciences (incl. agricultural)
- Social Sciences (incl. psychology)
- Physical Sciences (incl. environmental)
- Mathematical Sciences

Annual jobs available
Annual Bachelors degrees
Annual Masters degrees
Annual Doctoral degrees

BLS job projection data: http://www.bls.gov/emp/ind-occ-matrix/occupation.xlsx
Opportunities for CS/SE Graduates

• 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, 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
“… the software industry is going to make more breakthroughs in these next 10 years than it's made in the last 30 … software is really going to transform not just what we think about as the computer industry, but the way that everything is done …”
International Students

Maintaining F-1 Status
Maintain F-1 Status

You are responsible for knowing the immigration regulations that pertain to your status
Use the ISSO website as a reference
Contact an immigration advisor if you have questions
Make sure your address is up-to-date
Updated I-20s
Transfer Students
Complete Immigration Document Verification and iComet Module
“Maintaining F-1 Status”
Enrollment Requirements
Work Authorizations
Entering the United States

On April 30, 2021, President Biden signed a proclamation effective May 4, 2021, which bars entry of travelers coming from India similar to the previous geographic COVID-19 proclamations.

**Affected Individuals:**
Nonimmigrants, of noncitizens of the United States (“noncitizens”) who were physically present during the 14-day period preceding their entry or attempted entry into the United States in the following countries:

- India
- China
- Iran
- Brazil
- South Africa
- Schengen Area countries
- United Kingdom
- Ireland
Exceptions:
Students subject to these geographic COVID proclamations due to their presence in India, China, Iran, Brazil, or South Africa, may qualify for a National Interest Exception only if their academic program begins August 1, 2021 or later.
Students with valid F-1 visas intending to begin an academic program commencing August 1, 2021 or later do not need to contact an embassy or consulate to seek an individual National Interest Exception to travel. They may enter the United States no earlier than 30 days before the start of their academic studies.

Considerations:
Students with a summer start date who need to enter the United States prior to August 1, 2021 may consider traveling to a third country for at least 14 days prior to traveling to the U.S.
Students needing a visa may see if an embassy/consulate in a third country will accept them as a third country national.
Contacting the ISSO

During the COVID-19 pandemic, all advising services are being offered remotely. You can speak directly with our prospective student advisors. To chat, look for the “We Are Here” widget on our [F-1 Application webpage] during advising hours. All times are in Central Standard Time.

• **Mondays**  
  10 a.m. – 11:45 a.m.

• **Wednesdays**  
  10 a.m. – 11:45 a.m.

• **Fridays**  
  9 a.m. – 11 a.m.
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.
Cybersecurity Research
at
CS@UTD
Cyber Security Faculty

Cyber Security Institute (CSI) Founder
Dr. Bhavani Thuraisingham (Fall 2004)

Core Faculty
Dr. Latifur Khan (Fall 2000) Data Mining for Security
Dr. Kamil Sarac (Fall 2002) Computer Networks
Dr. Murat Kantarcioglu (Fall 2005) Data Security and Privacy
Dr. Kevin Hamlen (Fall 2006) Language and Software Security
Dr. Yiorgos Makris (EE) (Fall 2011) Hardware Security
Dr. Yvo Desmedt (Fall 2012) Cryptography
Dr. Kangkook Jee (Fall 2019) Systems Security
Dr. Zygmunt Haas (Fall 2013) Wireless Networks Security
Dr. Shuang Hao (Fall 2017) Network Security
Dr. Wei Yang (Fall 2018) Mobile Security and Adversarial ML
Dr. Chung Hwan Kim (Fall 2020) CPS Security, System & SW Security

UT Dallas is NSA/DHS Center for Academic Excellence in both Education (since 2004), Research (since 2008), and Cyber Operations (since 2015)
Latifur Khan
Professor, University of Texas at Dallas
Verified email at utdallas.edu - Homepage
Big Data Analytics  Stream Mining  Text Analytics  Cyber Security
Geo-graphic Data Processing

Cited by

<table>
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<tr>
<th>TITLE</th>
<th>CITED BY</th>
<th>YEAR</th>
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<tbody>
<tr>
<td>Decentralized IoT Data Management Using BlockChain and Trusted Execution Environment</td>
<td>2018</td>
<td></td>
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<tr>
<td>A complex task scheduling scheme for big data platforms based on Boolean Satisfiability Problem</td>
<td>2018</td>
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<tr>
<td>LogLens: A Real-Time Log Analysis System</td>
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<td>BCD: Decomposing Binary Code Into Components Using Graph-Based Clustering</td>
<td>2018</td>
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<tr>
<td>Systems and methods for automated detection of application vulnerabilities</td>
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Citations 7524
h-index 45
i10-index 141

Murat Kantarcioglu
Professor of Computer Science, University of Texas at Dallas
Verified email at utdallas.edu - Homepage
Security and Privacy  Databases  Data Science

Lifelong Machine Learning
Z Chen, B Liu
Synthesis Lectures on Artificial Intelligence and Machine Learning 12 (3), 1-207

Adversarial Machine Learning
Y Vorobyevsk, M Kantarcioglu
Synthesis Lectures on Artificial Intelligence and Machine Learning 12 (3), 1-169

Adversarial Anomaly Detection Using Centroid-Based Clustering
IC Anindy, M Kantarcioglu
2018 IEEE International Conference on Information Reuse and Integration (IRI... 

CHIRON: Deployment-quality Detection of Java Cryptographic Vulnerabilities
S Rahaman, Y Xiao, K Tian, F Shaon, M Kantarcioglu, D Yao

Towards a Privacy-Aware Quantified Self Data Management Framework
B Thuraisingham, M Kantarcioglu, E Bertino, JZ Bakdash, M Fernandez
Proceedings of the 23nd ACM on Symposium on Access Control Models and...
Kevin W. Hamlen

Computer Science Department - EC31
University of Texas at Dallas
800 W. Campbell Rd.
Richardson, TX 75080-3021

Office: ECSS 3.704
Phone: (972) 883-4724
Fax: (972) 883-2349
hamlen@utdallas.edu

I am currently an Associate Professor in the Computer Science Department at the University of Texas at Dallas, and a Senior Technical Advisor of UTD's Cyber Security Research and Education Institute. My research focus concerns the field of language-based security, which leverages techniques from programming language theory and compilers to enforce software security. Topics of interest include in-lined reference monitors, type-safe intermediate languages, software abstract interpretation and model-checking proof-carrying code, and certifying compilers. I also have ongoing projects related to malware defense and cloud computing security. My research is currently supported by grants from the U.S. Air Force Office of Scientific Research (AFOSR), the National Science Foundation (NSF), the Office of Naval Research (ONR), and Raytheon Company. See my CV for additional details.

I received my Masters and Ph.D. degrees from Cornell University, where my doctoral research was part of the Language-Based Security For Malicious Mobile Code initiative. For my thesis, I designed and implemented a certifying program-rewriting system for the Microsoft .NET Framework. I received my Bachelor's degree from Carnegie Mellon University, where I was involved in the Fox Project. For my undergraduate honor's thesis, I worked on Proof-Carrying Code for x86 architectures.
Yvo G. Desmedt

Jonsson Distinguished Professor

Department of Computer Science
The University of Texas at Dallas
Member of Cyber Security Research and Education Institute

Honorary Professor (Computer Science) at University College London

IACR Fellow

Member of the Belgium Academy of Science

Inventor of e-Passports and e-Visas (jointly with George Davida, 1988)
Erdős Number: 2

(Co-author list)
Scientific achievements

How to contact me

Research Interests

His main interests include cryptography, privacy, network security, critical infrastructure and computer security.
Kangkook Jee

Assistant Professor
Computer Science Department
University of Texas at Dallas

kangkook.jee (_at_) utdallas (_dot_) edu
Computer Science Dept.
University of Texas at Dallas
800 West Campbell Road, EC-31
Richardson, TX 75080

Job Openings

I have several RA openings available. I'm looking for Ph.D. students and other talented, highly motivated students to join my group. If you are interested, please feel free to drop me an email!

About

I am an assistant professor at Computer Science department at University of Texas at Dallas. Previously, I was a researcher in the Computer Security Department at NEC Labs America in Princeton, NJ. I received my Ph.D. in Computer Science from Columbia University. My advisor was Prof. Angelos D. Keromytis. Prior to my graduate study, I spent five years from industry working as a system engineer at IBM Korea.

Research Interest
Shuang Hao
Assistant Professor, University of Texas at Dallas
Verified email at utdallas.edu - Homepage
Security Networking Measurement

SEISMIC: SEcure In-lined Script Monitors for Interrupting Cryptojacks
W Wang, B Ferrell, X Xu, KW Hamlen, S Hao
European Symposium on Research in Computer Security, 122-142

Measuring Privacy Threats in China-wide Mobile Networks
M Zhang, B Liu, C Lu, J Zhang, S Hao, H Duan
8th USENIX Workshop on Free and Open Communications on the Internet (FOCI ... 

Rampart: Protecting Web Applications from CPU-Exhaustion Denial-of-Service Attacks
W Meng, C Qian, S Hao, K Borgolte, G Vigna, C Kruegel, W Lee
27th USENIX Security Symposium (USENIX Security 18)

A Reexamination of Internationalized Domain Names: the Good, the Bad and the Ugly
B Liu, C Lu, Z Li, Y Liu, H Duan, S Hao, Z Zhang
2018 43th Annual IEEE/IFIP International Conference on Dependable Systems ... 

In rDNS We Trust: Revisiting a Common Data-Source’s Reliability
T Fiebig, K Borgolte, S Hao, C Kruegel, G Vigna, A Feldmann
International Conference on Passive and Active Network Measurement, 131-145

Enumerating active IPv6 hosts for large-scale security scans via DNSSEC-signed reverse zones
K Borgolte, S Hao, T Fiebig, G Vigna
Enumerating Active IPv6 Hosts for Large-scale Security Scans via DNSSEC ...
Cybersecurity Education at CS@UTD
Graduate Level Cyber Security Classes

– Core Classes
  • CS 6324 Information Security
  • CS 6332 System Security and Malicious Code Analysis
  • CS 6348 Data and Application Security

– Electives (sample of recently offered ones)
  • CS 6301 Experimental Research in Cybersecurity
  • CS 6301 IoT Security
  • CS 6301 Analyzing and Securing Social Media
  • CS 6301 Language Based Security
  • CS 6349 Network Security
  • CS 6377 Introduction to Cryptography
  • CS 6301 Internet Measurement for Network Security
  • CS 7301 Information Theoretical Cryptography
  • CS 6301 Secure Cloud Computing
  • CS 6301 Information Security Analytics
Grad Level Information Assurance Track

Prereqs: CS5303, CS5330, CS5333, CS5343, CS 5348, CS 5390

Core Courses (15 semester credits):
CS 6324 Information Security
CS 6363 Design & Analysis of Computer Algorithms
CS 6378 Advanced Operating Systems

Plus two of the following four courses:
CS 6332 System Security and Malicious Code Analysis
CS 6348 Data and Application Security
CS 6349 Network Security
CS 6377 Introduction to Cryptography

Electives (minimum of 18 semester credits): 6000 or 7000 classes offered by Computer Science Department. Two electives should be among approved IA courses offered by the Computer Science Department. A course cannot be used to satisfy both core and elective requirements. Up to six credits can be earned by doing an MS thesis. The six hours of an MS thesis substitute one IA elective and one CS elective. MS thesis should be in IA area. Up to three hours can be obtained via an Independent Study class. An Independent Study may count toward CS or IA electives and the decision will be made by consultation with the independent study advisor and IA program advisor.
Graduate Certificate in Information Assurance

Must complete the following five courses with a GPA of 3.2 or better
• CS 6324 Information Security
• CS 6348 Data and Application Security
• CS 6349 Network Security
• CS 6363 Design & Analysis of Computer Algorithms
• CS 6378 Advanced Operating Systems

Cyber Operations Transcript Notation

Must complete six core and two elective courses below:

Core Courses
• CS 6301 Wireless Networks
• CS 6324 Information Security
• CS 6332 System Security & Malicious Code Analysis
• CS 6349 Network Security
• CS 6363 Design & Analysis of Computer Algorithms
• CS 6390 Advanced Computer Networks

Elective Courses
• ACCT 6336 Info Tech Audit and Risk Mgmt
• CE 6301 Advanced Digital Logic
• CS 6301 Secure Cloud Computing
• CS 6377 Intro to Cryptography
• CS 6396 Real Time Systems
• CS 7301 Cyber-physical Systems Security
• CS 6378 Advanced Operating Systems
• CS 6302 Microprocessor Systems
• CS 4397 Embedded Computer Systems
• CS 4398 Digital Forensics

Both programs endorsed by NSA

ACCT 6336, CS 4397, and CS 4398 do not count as an elective in the CS/SE graduate degree plan
Other Educational Programs

- Extra-curricular training
  - Computer Security Group (CSG) -- UTD student club
    - Peer/student organized hands on training
    - Participation in cyber security competitions

- Texas Security Awareness Week (TexSAW) Event
  - Annual event since 2011
  - 2-days student oriented events
    - 3 2-hour workshops
    - A ½ day mini cyber security competition
Graduate scholarships for domestic students
SFS scholarship program at UT Dallas

• Must pursue a grad degree in CS (typically MS in CS)
  – Up to 4 semesters support for MS students
  – Up to 6 semesters support for BS+MS fast track (FT) students

• What is covered?
  – Tuition and fees paid by the scholarship
  – Stipend: $25K for undergrad and $34K for grad students per academic year
  – $6K professional development funds per academic year
SFS scholarship program at UT Dallas, cont’d

• Eligibility requirements
  – Must be a FT or an MS student in Fall 2019 semester
  – Must have 3.2/4.0 or higher GPA
  – Must be a domestic student (US citizen or permanent resident)

• Program requirements
  – Must be a full time student not working elsewhere once in the program
  – Must pursue a grad degree (typically MS) in CS in information assurance concentration track
  – Must maintain a minimum GPA of 3.2/4.0
  – Must graduate within time: 6 semesters for FT and 4 semesters for MS students
SFS scholarship program at UT Dallas, cont’d

• Other program requirements
  – Are you ready for the commitment?
    • Pursue an MS degree in CS
    • Minimum work requirement in a government agency after your graduation
  – Are you flexible to relocate for summer internships and full time jobs?
  – Any concerns for obtaining a security clearance?
GRADUATE DEGREE PLANNING SEMINAR
Fall 2021

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

The University of Texas at Dallas
Orientation/Degree Planning Seminar Overview

• Welcome – Dr. DT Huynh, Interim Department Head
• Graduate Advisors Computer Science Program
• Master of Science Degree Planning
• Areas of Study (Track)
  - Traditional Computer Science
  - Networks and Telecommunications
  - Intelligent Systems
  - Information Assurance
  - Systems
  - Data Science
  - Interactive Computing
  - MS in Software Engineering
• Annual Graduate Degree Planning Form submission
• Registration
Graduate Advisors

Prof. Shyam Karrah  Prof. Pushpa Kumar  Prof. Laurie Thompson  Prof. Tim Farage
COMPUTER SCIENCE DEPARTMENT
GRADUATE ADVISORS

Prof. Laurie Thompson  ECSS 3.701  972.883.6326  lthomp@utdallas.edu
MS (not Thesis) last names A – K

Prof. Pushpa Kumar    ECSS 4.407  972.883.6904  pkumar@utdallas.edu
MS (not Thesis) last names M – P

Prof. Tim Farage      ECSS 3.609  972.883.4836  tfarage@utdallas.edu
MS (not Thesis) last names Q – Z

Prof. Shyam Karrah    ECSS 3.907  972.883.4197  skarrah@utdallas.edu
All PhD    All MS - Thesis, and IA and SE Tracks    All MS-Fast Track
INSIDE the SUITE 3.908

Mrs. Emily Lenart-Donaldson  ECSS 3.905  972-883-4278  eldonaldson@utdallas.edu
CS_MSCS A-J (Not IA track, Not Thesis)

Ms. Rachel Spataro  ECSS 3.906  972-883-4194  rachel.spataro@utdallas.edu
CS_MSCS K-P (Not IA track, Not Thesis) ; all SE_MS (Not Thesis or PhD Masters)

Mr. Eric Moden  ECSS 3.904  972-883-4705  eric.moden@utdallas.edu
CS_MSCS Q-T; All IA track students (Except PhD Masters and Thesis MS)

Mr. Jesus Mata  ECSS 3.902 972-883-6175  Jesus.Mata@utdallas.edu
CS_MSCS U-Z (Not IA track, Not Thesis)

Mr. Doug Hyde  ECSS 3.908B 972-883-6612  dhyde@utdallas.edu
All PhD;  All PhD with Masters;  All MS with a Thesis (all tracks)

Mrs. Nirmala Manalan  ECSS 3.903 972-883-4216  Nirmala.Manalan@utdallas.edu
Admission Processor

The staff members are NOT Graduate ADVISORS. For any questions on classes, choosing a degree plan.. etc, contact your Graduate Advisor.
Early registration registration for spring semester takes place in November and for the summer & fall starts in April; enrollment appointments are placed on your Orion account based on earned hours, and it is randomized. It’s your responsibility to check out the schedule online and register for classes online.

If you know the courses you wish to take and have no prerequisites or holds on your account, you may Enroll online and can also contact the appropriate staff member for help with registration. They can also answer some of your general questions regarding course schedules, give out transfer/waiver forms, help with your graduation application or schedule appointments with a graduate advisor.

**Students are strongly recommended NOT to register in more than TWO CORE COURSES from any degree plan.**
Master of Science in Computer Science (33 credit hours)
- Traditional Computer Science
- Networking and Telecommunications
- Intelligent systems
- Information Assurance
- 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 EE Departments
- Computer Engineering & Telecommunications Engineering
Master of Science Degree Plan

Department of Computer Science MS Requirements

- Five Core Courses from one of the tracks
- Six approved electives; at least five must be at 6000 or higher level and one approved elective can be a 5000* or a 6000 level course in.
- All requirements including transfer credit must be completed in a six year window.

GPA requirements:

- Core GPA ≥ 3.19
- Elective GPA ≥ 3.00
- Overall GPA ≥ 3.00

(* All degree plans except information assurance track)
If core GPA is above 3.00 but below 3.19, a seventh elective is 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, they must file a Repeated Course Adjustment form (RCA) with the registrar’s office. 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/2020/graduate/home
Master of Science Degree Plan

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 ALL treated as Transfer Credits*
- All course grades in Option B or C WILL affect your GPA*

Fast Track Admits will have:
- assigned Advisors and MS DPEs by last name alpha, Track and/or Thesis option.

*Subject to new university policies
Dear

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 http://udallas.edu/enroll/graduateadvisors.

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 http://www.udallas.edu/enroll/graduate. Should you need to defer your 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.udallas.edu.

cc: file ECS CS F
Your official admissions letter may state any required prerequisites recommended by the admissions committee.

In case you have not seen your prerequisites or missed it in your emails, contact a staff member to check out your prerequisites.

You are responsible for any prerequisites required for your Degree Plan (track) and also for any course you choose.
Admission Prerequisites

- Students from Non CS/Related backgrounds **MUST** complete the following **MINIMUM** prerequisites:
  - CS5303 (Computer Programming)
  - CS 5330 (CS 2340) (Computer Architecture)
  - CS 5333 (Discrete Structures),
  - CS 5343 (Data Structures & Algorithm Analysis) and
  - CS 5348 (Operating Systems).

- You must **COMPLETE** your assigned 5000 level courses applicable to your degree plan in the first year of study.
Admission Prerequisites

- If a 5000 level course is not offered, or if you have a scheduling conflict, a graduate advisor may approve the undergraduate equivalent course.
  - *The undergraduate course grade is not computed towards your graduate GPA.

- Supported students must take 9 graduate hours.

- All prerequisites in your degree plan must be completed at the time of CPT assignment.
Core Courses

- If you are choosing IA (Eric) or SE (Rachel) degree plan, you must complete the required core and elective 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 and specially summer semester.
Core Courses

- Students planning to pursue PhD program in the near future should enroll in the QE sections and sign up for the Qualifying exam to strengthen their application.

- PhD students should enroll in QE sections of the core courses even if the QE sequence is completed.

- Department awards Certificate of excellence in academics to those students who maintain 3.9* or higher GPA.

*may change depending on the 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;

<table>
<thead>
<tr>
<th>Grade</th>
<th>GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.00</td>
</tr>
<tr>
<td>A-</td>
<td>3.67</td>
</tr>
<tr>
<td>B+</td>
<td>3.33</td>
</tr>
<tr>
<td>B</td>
<td>3.00</td>
</tr>
<tr>
<td>B-</td>
<td>2.67*</td>
</tr>
<tr>
<td>C+</td>
<td>2.33</td>
</tr>
<tr>
<td>C</td>
<td>2.00</td>
</tr>
<tr>
<td>F</td>
<td>0.00</td>
</tr>
</tbody>
</table>

* 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
    • Payment
    • Final Defense
    • Graduation

• The dates update constantly.

• Confirm the date ONLINE not on paper.
Enrolling, Dropping or Swapping

• The Last day to add/Swap Courses is August 30th.

• **DO NOT** drop classes online.

• For any Add, Drop or Swap please meet with a CSGS Advisor.
# Official Academic Calendar Fall 2021

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

## Classes Begin

<table>
<thead>
<tr>
<th>Session Type</th>
<th>Start Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full session</td>
<td>Monday, August 23</td>
</tr>
<tr>
<td>1st 8-week session</td>
<td>Monday, August 23</td>
</tr>
<tr>
<td>2nd 8-week session</td>
<td>Monday, August 23</td>
</tr>
</tbody>
</table>

## Web Registration

- Enrollment appointments available online: Monday, March 20
- Students must complete their enrollment appointment details in OnCourse for the dates and times they can begin registering.

## Final Exams

- Full session: Tues., Dec. 7 - Mon., Dec. 13
- 1st 8-week session: Mon. Oct. 11 - Sat. Oct. 16
- 2nd 8-week session: Tues. Nov. 7 - Mon. Nov. 13

## Last Day for Re-admission/Re-entry

Friday, August 13

## Last Day for Regular Registration

- Full session: Thursday, August 19
- 1st 8-week session: Thursday, August 19
- 2nd 8-week session: Thursday, October 14

## Late Registration and Last Day to Add/Withdraw

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 Banner’s Office information.

## Census Day (State Reporting Date)

- Full session: Wednesday, September 8
- 1st 8-week session: Monday, August 30
- 2nd 8-week session: Friday, Oct. 15 - Monday, Oct. 25

## Drop/Withdrawal Deadlines

Please check correct calendar for signature procedures.

## Full Term Session

- Last day to drop a class without a "W": Wed., Sept. 8
- Unograduate Courses: Approval required: Thurs., Sept. 8 - Thurs., Nov. 3
- Grad Courses: Withdrawal: Wed., Nov. 3

## Fall 8-Week Session

- Last day to drop a class without a "W": Mon., Aug. 30
- Unograduate Courses: Approval required: Tues., Aug. 31 - Mon., Sept. 27
- Grad Courses: Withdrawal: Mon., Sept. 27

## 2nd 8-Week Session

- Last day to drop a class without a "W": Mon., Oct. 25
- Grad Courses: Withdrawal: Mon., Nov. 22

## Final Grading Period

All grades must be received by Monday, December 20

## Final Grades Viewable Online

- Final grades must be received by Monday, December 20
- Final exam week: Tues., Dec. 7 - Mon., Dec. 20
- Final exam period: Tues., Dec. 7 - Mon., Dec. 20

## Graduation Information

- Graduation Application: Thursday, August 1
- Graduation Ceremony: Tuesday, December 14
- Commencement Activities: Tues., Dec. 14 - Sat., Dec. 18
- Commencement tickets available online: Monday, December 5
- Graduation Convocation: Tuesday, December 14

## Drop/Withdrawal Deadlines

- Full term: Fri., Dec. 10 - Fri., Dec. 17
- 8-week sessions: Fri., Nov. 12 - Fri., Nov. 19

## Undergraduate Courses

- Approval required: Tues., Oct. 26 - Mon., Nov. 22
- Grad Courses: Withdrawal: Mon., Nov. 22

## Incompletes

Incomplete grades due for undergraduates and graduates from previous semesters:  Friday, December 18
To take a CS 6000 level graduate course:

- Have a transcript showing that you have completed the prerequisite courses in your undergraduate work
- Petition the Graduate Advisor for approval to enroll in the CS 6000 level course.

**PLS NOTE THE PREREQISITES WILL NOT BE WAIVED TODAY BY ANY ADVISOR.**

- YOU MUST APPLY SEPARATELY IN SEPTEMBER TO WAIVE YOUR PREREQUISITES.
- Refer to the UTD Graduate Catalog for prerequisites.
Transfer/Waiver of Courses

- Transfer/Waiver seminars are scheduled in the second month of each long semester. The tentative Fall semester seminar dates are:
  - September 3rd week
  - September 24th from 5:00pm – 6:00pm.
- Date and time will be announced late August.
- Due date of T/W applications is 4pm on Friday, October 8th. The completed applications must be placed in a box available in the Lobby of Graduate Studies Student Services Suite ECSS 3.908 or Emailed to dhyde@utdallas.edu
Transfer/Waiver of Courses

- Students from Non CS/Related backgrounds **MUST** complete the following **MINIMUM** prerequisites:
  - CS 5330 (Computer Architecture) (*equivalent UG course is CS 2340*)
  - CS 5333 (Discrete Structures),
  - CS 5343 (Data Structures & Algorithm Analysis) and
  - CS 5348 (Operating Systems).

- The above prerequisites generally will not be waived for the students from Non CS/Related backgrounds.

- Students who plan to waive prerequisite courses and/or transfer graduate courses are strongly suggested to visit with program/advising office to check for eligibility.

- Students who are not qualified to apply for waivers must take the pre-requisites.
Tentative Degree Plan of Study

➢ Select your area of Computer Science Concentration:
  – Traditional Computer Science
  – Networks and Telecommunications
  – Intelligent Systems
  – Information Assurance
  – Systems Track
  – Data Science
  – Interactive Computing
  – Software Engineering (Must be SE_MS or SE_DR program)

➢ Prerequisites
  – Cross out any not listed in your Admission Letter

➢ Complete Core, Elective, and Prerequisite courses
  – Enter the course name, number, grade, and semester
    • 21F = Fall 202
    • 22S = Spring 2022
    • 22U = Summer 2022
Review of Tentative Degree Plan of Study

- 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 Prerequisite Courses required by track.

- Submit your AOP to your Graduate Studies Staff member by the first week of October. This is a University requirement.
  - Otherwise, you will have a degree plan hold.

- Review your Tentative Degree Plan with a Graduate Advisor.
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.
# Computer Science Degree Plan

**DEGREE PLAN**

**UNIVERSITY OF TEXAS AT DALLAS**

**MASTER OF COMPUTER SCIENCE**

**COMPUTER SCIENCE DEGREE PLAN**

FT: Y N

Name of Student: ________________________________

Student I.D. Number: ____________ / ______ / ____________

Anticipated Date of Admission to Program: _______________ Graduation: _______________

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Course Number</th>
<th>UTD Semester</th>
<th>Transfer</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CORE COURSES</strong></td>
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<tr>
<td>Name</td>
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<table>
<thead>
<tr>
<th><strong>FIVE APPROVED 6000 LEVEL ELECTIVES</strong></th>
<th>(15 * Credit Hours)</th>
<th>3.2 Grade Point Average</th>
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<tbody>
<tr>
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Additional Electives (3 Credit Hour minimum)

| 1                                      |                      |                         |
| 2                                      |                      |                         |
| 3                                      |                      |                         |
| 4                                      |                      |                         |

| **Other Requirements**                 |                       |                         |

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<thead>
<tr>
<th><strong>Admission Prerequisites</strong></th>
<th>Course Number</th>
<th>UTD Semester</th>
<th>Waiver</th>
<th>Grade</th>
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<tbody>
<tr>
<td>Name</td>
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<td>Name</td>
<td>CS 5XXX</td>
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</table>

* May include any 5000 or 6000 level CS course without prior permission

Academic Advisor: _____________________________ Date Submitted: ____________ / ______ / ______

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### Core Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>UTD Semester</th>
<th>Transfer</th>
<th>Grade</th>
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### Five Approved 6000 Level Electives

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<tr>
<th>Course</th>
<th>UTD Semester</th>
<th>Transfer</th>
<th>Grade</th>
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</table>

### Additional Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>UTD Semester</th>
<th>Transfer</th>
<th>Grade</th>
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</table>

### Admission Prerequisites

<table>
<thead>
<tr>
<th>Course</th>
<th>UTD Semester</th>
<th>Waiver</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 5XXX</td>
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<tr>
<td>CS 5XXX</td>
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</tbody>
</table>

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 UT DALLAS
# Traditional Computer Science Plan

## Core Courses - Traditional

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 6363</td>
<td>Computer Algorithms</td>
</tr>
<tr>
<td>CS 6378</td>
<td>Advanced Operating Systems</td>
</tr>
<tr>
<td>CS 6390</td>
<td>Advanced Computer Networks</td>
</tr>
<tr>
<td>CS 6353</td>
<td>Compiler Construction</td>
</tr>
<tr>
<td>CS 6360</td>
<td>Database Design</td>
</tr>
<tr>
<td>CS 6371</td>
<td>Structure and Design of Programming Languages</td>
</tr>
</tbody>
</table>

*Any two of the following:*
## Data Science Plan

### Core Courses – Data Science

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 6313</td>
<td>Statistical Methods for Data Science</td>
</tr>
<tr>
<td>CS 6350</td>
<td>Introduction to Big Data Analytics</td>
</tr>
<tr>
<td>CS 6363</td>
<td>Design &amp; Analysis of Comp. Algorithms</td>
</tr>
<tr>
<td>CS 6375</td>
<td>Machine Learning</td>
</tr>
</tbody>
</table>

*Any one of the following:*

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 6301</td>
<td>Special Topic: Social Network Analytics</td>
</tr>
<tr>
<td>CS 6320</td>
<td>Natural Language Processing</td>
</tr>
<tr>
<td>CS 6327</td>
<td>Video Analytics</td>
</tr>
<tr>
<td>CS 6347</td>
<td>Statistics in AI and Machine Learning</td>
</tr>
<tr>
<td>CS 6360</td>
<td>Database Design</td>
</tr>
</tbody>
</table>
## Information Assurance Plan

### Core Courses – Information Assurance

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 6324</td>
<td>Information Security</td>
</tr>
<tr>
<td>CS 6363</td>
<td>Design &amp; Analysis of Computer Algorithms</td>
</tr>
<tr>
<td>CS 6378</td>
<td>Advanced Operating Systems</td>
</tr>
</tbody>
</table>

*Any two of the following:*

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 6332</td>
<td>System Security &amp; Malicious Code Analysis</td>
</tr>
<tr>
<td>CS 6348</td>
<td>Data and Application Security</td>
</tr>
<tr>
<td>CS 6349</td>
<td>Network Security</td>
</tr>
<tr>
<td>CS 6377</td>
<td>Introduction to Cryptography</td>
</tr>
</tbody>
</table>

No 5xxx courses can be applied to this track.
Must also complete 2 IA approved Electives.

Eric Moden will be your DPE and Shyam Karrah your Academic Advisor.
## Core Courses - Intelligent Systems

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 6320</td>
<td>Natural Language Processing</td>
</tr>
<tr>
<td>CS 6363</td>
<td>Design &amp; Analysis of Computer Algorithms</td>
</tr>
<tr>
<td>CS 6364</td>
<td>Artificial Intelligence</td>
</tr>
<tr>
<td>CS 6375</td>
<td>Neural Nets and Machine Learning</td>
</tr>
<tr>
<td></td>
<td>Plus one of the following</td>
</tr>
<tr>
<td>CS 6360</td>
<td>Database Design</td>
</tr>
<tr>
<td>CS 6378</td>
<td>Advanced Operating Systems</td>
</tr>
</tbody>
</table>
## Interactive Computing Plan

<table>
<thead>
<tr>
<th>Core Courses – Interactive Computing</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 6326</td>
<td>Human Computer Interaction</td>
</tr>
<tr>
<td>CS 6363</td>
<td>Design &amp; Analysis of Computer Algorithms</td>
</tr>
</tbody>
</table>

**Any three of the following:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 6323</td>
<td>Computer Animation &amp; Gaming</td>
</tr>
<tr>
<td>CS 6328</td>
<td>Modeling and Simulation</td>
</tr>
<tr>
<td>CS 6331</td>
<td>Multimedia Systems</td>
</tr>
<tr>
<td>CS 6334</td>
<td>Virtual Reality</td>
</tr>
<tr>
<td>CS 6366</td>
<td>Computer Graphics</td>
</tr>
</tbody>
</table>
## Networks and Telecommunications Plan

### Core Courses - Networks

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 6352</td>
<td>Performance of Computer Systems &amp; Networks</td>
</tr>
<tr>
<td>CS 6363</td>
<td>Computer Algorithms</td>
</tr>
<tr>
<td>CS 6378</td>
<td>Advanced Operating Systems</td>
</tr>
<tr>
<td>CS 6385</td>
<td>Telecommunication Networks</td>
</tr>
<tr>
<td>CS 6390</td>
<td>Advanced Computer Networks</td>
</tr>
</tbody>
</table>
# Systems Degree Plan

## Core Courses – Systems

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 6304</td>
<td>Computer Architecture</td>
</tr>
<tr>
<td>CS 6363</td>
<td>Computer Algorithms</td>
</tr>
<tr>
<td>CS 6378</td>
<td>Advanced Operating Systems</td>
</tr>
<tr>
<td>CS 6396</td>
<td>Real Time Systems</td>
</tr>
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</table>

*Any one of the following:*

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 6349</td>
<td>Network Security</td>
</tr>
<tr>
<td>CS 6376</td>
<td>Parallel Processing</td>
</tr>
<tr>
<td>CS 6380</td>
<td>Distributed Systems</td>
</tr>
<tr>
<td>CS 6397</td>
<td>Synthesis and Opt of High Perf. Systems</td>
</tr>
</tbody>
</table>
## Core Courses - Software Engineering

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SE 6329*</td>
<td>Object Oriented Software Engineering</td>
</tr>
<tr>
<td>SE 6361</td>
<td>Advanced Requirements Engineering</td>
</tr>
<tr>
<td>SE 6362</td>
<td>Advanced Software Architecture and Design</td>
</tr>
<tr>
<td>SE 6367</td>
<td>Software Testing, Validation &amp; Verification</td>
</tr>
<tr>
<td>SE 6387</td>
<td>Advanced Software Engineering Project</td>
</tr>
</tbody>
</table>

* 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:
  - CS 6329 Object-Oriented Software Engineering, and
  - CS 6359 Object-Oriented Analysis and Design (cannot be used on SE degree plan)

Rachel Spataro will be your DPE and Shyam Karrah your Academic Advisor.
## Prerequisites

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>CS 5303</td>
<td>Computer Science I</td>
</tr>
<tr>
<td>CS 5330</td>
<td>Computer Science II</td>
</tr>
<tr>
<td>CS 5333</td>
<td>Discrete Structures</td>
</tr>
<tr>
<td>CS 5343</td>
<td>Algorithm Analysis &amp; Data Structures</td>
</tr>
<tr>
<td>CS 5348</td>
<td>Operating Systems Concepts</td>
</tr>
</tbody>
</table>
## Additional Prerequisites

### Traditional
- CS 5349: Automata Theory *
- CS 5390: Computer Networks

### Software Engineering
- CS 5354: Software Engineering

### Networks
- CS 3341: Probability & Statistics
- CS 5390: Computer Networks

### Information Assurance
- CS 5390: Computer Networks

### Systems
- CS 5390: Computer Networks

### Data Science
- CS 3341: Probability & Statistics

* Only for CS 6353-Compiler Construction & CS 6371-Structure & Design of Programming Languages
Students Seeking IA Certificate must start the process one semester (at the beginning) prior to graduating semester. After the degree plan audit with your advisor, you would ask your DPE to set you eligible to apply for the Certificate as well as your MS degree.

The Certificate must be applied for just as you applied for the MS or PhD program. Use the same application method and choose CSND_INASCERT.

Once admitted to the INASCERT 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 6363 Design & Analysis of Computer Algorithms
- CS 6378 Advanced Operating Systems

The conferral date and program (INASCERT) 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 request to your DPE for Cyber Op Notation.

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

<table>
<thead>
<tr>
<th>Core Courses</th>
<th>Elective Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>• CS 6340 Wireless Networks</td>
<td>• ACCT 6336 Info Tech Audit and Risk Mgmt *</td>
</tr>
<tr>
<td>• CS 6324 Information Security</td>
<td>• CE 6301 Advanced Digital Logic</td>
</tr>
<tr>
<td>• CS 6332 System Security &amp; Malicious Code Analysis</td>
<td>• CS 6301 Secure Cloud Computing</td>
</tr>
<tr>
<td>• CS 6349 Network Security</td>
<td>• CS 6377 Intro to Cryptography</td>
</tr>
<tr>
<td>• CS 6363 Design &amp; Analysis of Computer Algorithms</td>
<td>• CS 6396 Real Time Systems</td>
</tr>
<tr>
<td>• CS 6390 Advanced Computer Networks</td>
<td>• CS 7301 Cyber-physical Systems Security</td>
</tr>
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<td></td>
<td>• CS 6378 Advanced Operating Systems</td>
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<tr>
<td></td>
<td>• CS 6302 Microprocessor Systems</td>
</tr>
<tr>
<td></td>
<td>• CS 4397 Embedded Computer Systems *</td>
</tr>
<tr>
<td></td>
<td>• CS 4398 Digital Forensics *</td>
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<td></td>
<td>*</td>
</tr>
</tbody>
</table>

ACCT 6336, CS 4397, and/or CS 4398 will not count as an 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**
Policies and Procedures

Students:

- must have a signed acknowledgement of policies (AOP) in the file before end of first semester (October).
- must be in the correct Program 2 semesters before graduation.
- **Changing from CS_MSCS to SE_MS or from SE_MS to CS_MSCS requires a New Application.**
- **Changing from CS_DR to SE_DR or from SE_DR to CS_DR requires a New Application.**
- visit with an academic advisor annually for a degree plan audit and the SEMESTER prior to graduation for the grad audit.
- **Choosing to miss more than a week of classes at the beginning of the semester may result in your being dropped or swapped into another course.**
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

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.

We have one DPE for MS thesis…Doug Hyde
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. This course cannot be used towards the graduation requirements. Students signing up for CPT must visit with a Graduate Advisor.

- The USCIS has determined that F1 students who are graduating may take only the courses required for graduation/course completion in their final 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
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).
Registration Process

• Early registration for Spring 2022 semester starts Nov. 2021.

• Early registration for Fall and Summer 2022 starts in April 2022.

• **Enrollment appointments are placed on your Orion account based on earned hours, and is randomized.**
  • 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 encourages 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.
Registration Process

• FERPA will not allow another student to represent you for enrollment. You should not accept another person's 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 a CS Graduate Studies Director.
Graduates of Computer Science

- 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.
Recruiting Resources

- Fall and Spring Intern Fairs
- Fall and Spring Career Expos
- Campus Interview program
- Employer Spotlights
- Handshake job portal
- 3 Jonsson School internship coordinators provide guidance on best practices for your job search.
Welcome to The University of Texas at Dallas!

Our program is designed specifically to provide career development support to Jonsson School students. Website: https://engineering.utdallas.edu/engage/students/internships/

Mary Ann Chou Stewart
Assistant Director
mary.ann.stewart@utdallas.edu
Last Names: A to F

Kori Farley
Internship Coordinator
kori.farley@utdallas.edu
Last Names: G to N

Andrea Crosdale Woudw
Internship Coordinator
acwoudwyk@utdallas.edu
Last Names: O to Z

Monday- Friday: 8am-5pm. Campus Office Location: ECS South 2.502 (N/A due to C-19)

Email your internship coordinator (include UTD ID or Net ID please) if you have questions or if you would like to schedule a virtual appointment.

Services We Provide:

- CPT Orientations
- Resume Workshops
- Resume Critiques
- CPT Advising
- Interview Workshops
- Mock Interviews
- CPT Approval
- Job Search Workshops
- One-on-One Advising
- Internship Courses for Credit
- Internship Fairs
- Recruiting Events

IPP CPT ORIENTATION – JONSSON SCHOOL F1 VISA STUDENTS

Attendance is mandatory for all international students on an F1 visa prior to receiving an internship. We offer Remote CPT Orientation and Virtual CPT Orientation. We will email you the schedule for fall after semester begins.

WORKSHOPS - Resume, Interview, Job Search

In these workshops, IPP Internship Coordinators discuss the best standards and practices for internship search. We will email you the schedule for fall after semester begins.
• **ALL CS and SE PhD STUDENTS**

• PhD additional information Orientation and Advising will be held on a separate date and you will receive an email

Dr. Jorge Cobb
Professor, CS Department
Schedule Planner

1. Log In
   - Sign into GALAXY

2. Locate Schedule Planner
   - Under Student Services
   - Click "Schedule Planner"

3. Add Courses
   - To take next term

4. Add Breaks
   - To block off time for no class

5. Generate
   - All possible schedules

6. View
   - To see each schedule

7. Send to Shopping Cart
   - From the "View" screen, click the "Shopping Cart" button to begin registration
For more information:

Visit

cs.utdallas.edu/news/

Or

Contact Shyam Karrah at: skarrah@utdallas.edu
The End

thank you