



IoT and Telecommunications Engineering

UNDERGRADUATE SUMMER SCHOOL (3-WEEK ONLINE PROGRAM)
JULY 29 - AUGUST 18, 2021
APPLICATION DEADLINE: MAY 31



Department of Electrical and Computer Engineering Rankings

#3 Graduate Program, Computer Engineering
#4 Graduate Program, Electrical Engineering

Program Fee: \$750

Apply Here



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伊利诺伊大学全球教育与培训



Seminar Description

The seminar series will be centered around the broad topics of mobile computing, wireless sensing and communication, and IoT, with specific connections to modern technologies and applications, like WiFi, OFDM, 5G, and RFID.

Program Schedule

- Week 1** LECTURES & TA LED Q&A
- Week 2** TEACHING ASSISTANT (TA) LED READING WEEK
- Week 3** PROGRAM WRAP UP AND QUIZ

TEACHING ASSISTANTS WILL SUPPORT A 1-HOUR DISCUSSION DAILY FOR BOTH SEMINAR AND READING WEEK.

Online Format

Videoconference lectures will be synchronous.

Participants will need access to Wi-Fi and a device (computer, laptop, or tablet) suitable for participation in online videoconference sessions.

UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN FACULTY



**ROMIT ROY
CHOUDHURY**

*Professor of
Electrical and
Computer
Engineering*



**HAITHAM
AL-HASSANIEH**

*Assistant Professor
of Electrical
and Computer
Engineering*

Seminar Topics

WIRELESS AND MOBILE IOT (5 HOURS)

- Wireless and Mobile Localization: Foundations, Technologies, and Applications
- Wearable Computing: Vision, Ideas, and Applications
- Assorted Topics in IoT and Mobile Computing

WIRELESS COMMUNICATIONS (5 HOURS)

- Wireless Communications: Fundamentals, Modulation, Channel
- Next Generation Wireless: 5G, Wifi 6, OFDM
- Low Power Wireless IoT: RFID, LoRA, Bluetooth

READING WEEK SESSIONS (4 HOURS)

The readings will further the students' knowledge and understanding of the subjects presented during the seminar week. A UIUC graduate student will lead discussions and answer questions to help students understand the content.

PROBLEM-SET WRAP UP SESSIONS (4 HOURS)

Faculty will guide the students' understanding of the reading by reviewing and discussing problem sets. The faculty will share the problem sets before the wrap-up session. The students will solve the problems and the faculty will discuss the solutions during the session. The faculty will also answer students' final questions during the discussions.

Co-Curricular Sessions (4 HOURS)

Enriching students' experiences by providing interactive resources for planning their overseas U.S. education.

- Q&A with PhD student: graduate applications & research skills; writing academic research reports
- Graduate College: how to be a successful graduate student
- Career Services: intercultural communication and personal branding
- Program recognition & learning outcome showcase, led by University of Illinois & GET staff members

Program Details

Students must be entering second year of college or later. Through the seminar series, students will learn how algorithmic challenges can be handled, and how such algorithms need to be engineered and creatively applied, to bridge the gap between theory and practice.

- All classes in English
- 30 hours of engagement
- Final quiz required
- Certificates awarded upon completion
- Course times 8:00 a.m. - 11:00 a.m. local China time
- Classes Monday through Friday
- Minimum of 50 students needed to run program

CONTACT OUR TEAM

MENG LIU, PROGRAM COORDINATOR, MENGLIU2@ILLINOIS.EDU

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