



**Isfahan
University of
Technology**

Department of Electrical and Computer Engineering

In The Name of God

Contents

	Page
Overview	1
Degree Programs	3
Honors and Awards	7
Research Areas	9
Events, Workshops and Conferences	13
Labs	17



Overview

The Department of Electrical and Computer Engineering at Isfahan University of Technology (IUT) has welcomed the most talented students from throughout the country, for more than four decades. Having continuously flourished in education and research, the department now offers both graduate and undergraduate programs in all the branches of ECE.

The students graduating from our department have had a high success rate in pursuing their career as professional engineers in the national and provincial industry, as industrial managers, or as faculty members of other universities. From the international perspective, our graduates have also found their way into many successful companies in the worldwide industry and into prestigious universities as faculty members or researchers, which has made a great international reputation for our department.

Our first goal in the ECE department is to train creative, innovative, and hard-working students who could develop the skills they need for the future. Towards this aim, in addition to the required courses, we offer hands-on experience in 40 educational laboratories and research opportunities in more than 30 research labs.

Our department has now 75 faculty members, more than 1200 undergraduate students, and about 600 graduate students, in diverse fields of Electrical Engineering (Control, Power, Electronics, Communications, and Biomedical Engineering) and Computer Engineering (Software and Information Technology, Artificial Intelligence, Computer Architecture, Secure Computing, and Computer Networks).

We have also been offering national and international postdoctoral positions, in joint programs with the National Elites Foundation, and Iran National Science Foundation (INSF), which has been a great opportunity for fresh Ph.D. graduates to expand their research while evaluating the options for their future careers.

We are also honored that our alumni have founded and developed successful research centers at IUT such as the APA center, Avionics Research Center, and the Center of Information Technology, which have been by our side in our collaborations with the industry.

Website: **ece.iut.ac.ir**

Telephone: **+98 31 3391 2450**

Fax: **+98 31 3391 2451**



Department of Electrical and Computer Engineering



Degree Programs

■ B.Sc

140 Credits

- Communications
- Control Systems
- Electronics
- Power
- Software Engineering
- Hardware Engineering
- Information Technology Engineering
- Computer Security
- Intelligent Computer Systems

■ M.Sc

23 credits + Thesis with 6 credits

- Bioelectric
- Communications - Systems
- Communications - Fields and Waves
- Communication Networks
- Control Systems
- Integrated Circuits
- Power Electronics, Electric Machines and Drives
- Power Systems
- Software Engineering
- Hardware Engineering
- Artificial Intelligence
- Artificial Intelligence (E-Learning, Course Based)

■ Ph.D

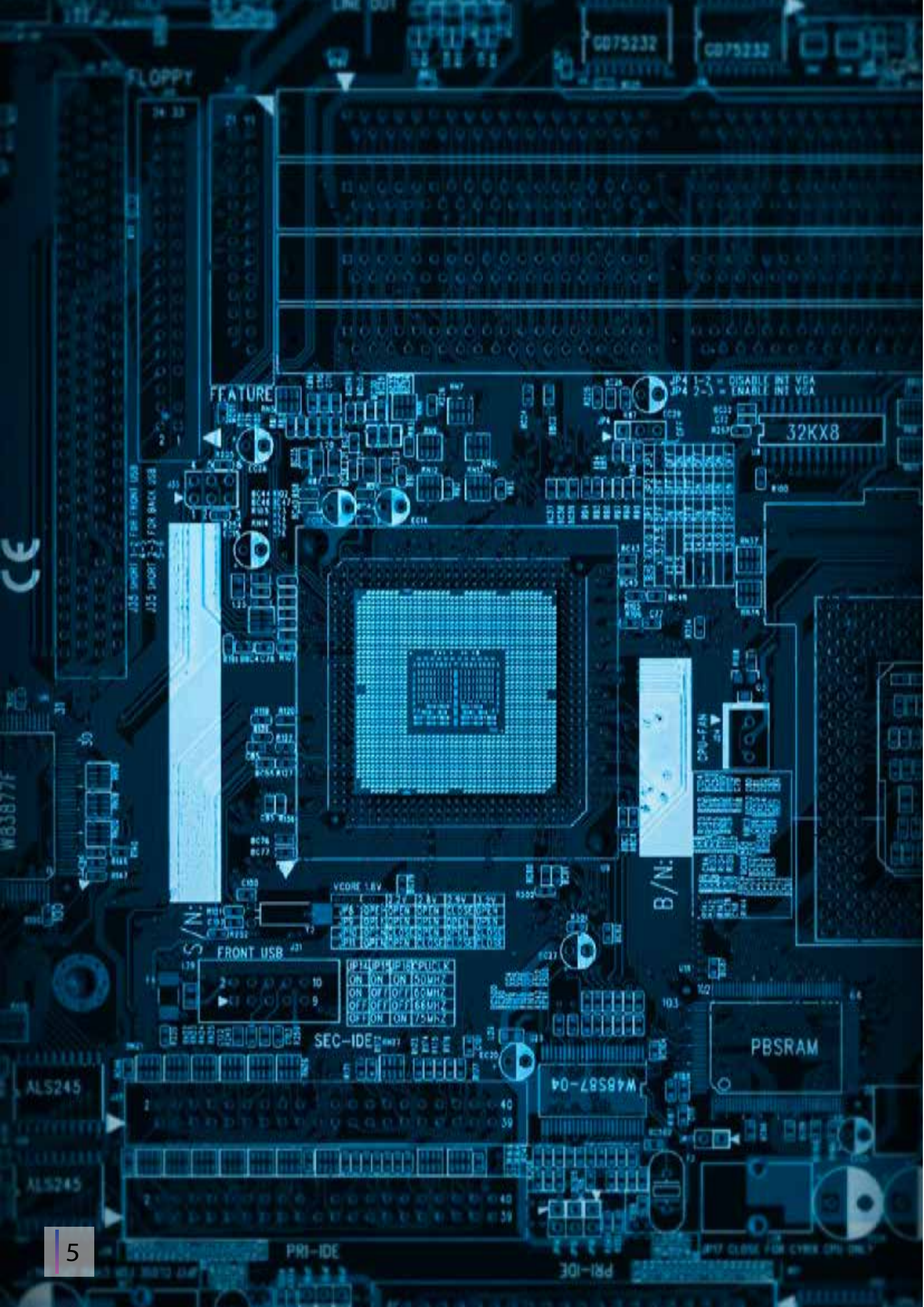
18 credits + Dissertation with 18 credits

- Communications - Systems
- Communications - Fields and Waves
- Control Systems
- Electronics
- Power
- Software Engineering
- Hardware Engineering
- Artificial Intelligence

To accomplish a successful B.Sc. in Electrical and Computer Engineering, undergraduate students must take 20 credits in general courses, 20-30 credits in basic courses, 80-90 credits in compulsory courses, 10-20 credits in elective courses, and a project with 3 credits (total 140 credits).

Graduate students must take 6-12 credits in compulsory courses, 9-15 credits from elective courses, two credits from a seminar, and 6 credits from a thesis, overall 29 credits to receive an M.Sc. degree. The Ph.D. program consists of 18 credits of coursework and 18 credits of dissertation. Students must pass the written and oral comprehensive exams after completion of coursework.





Honors and Awards



7

Two times winner of the best national student award

2

The winner of the best book of the year.

3

Three times winner of the distinguished researcher award

4

Award winner of outstanding researcher in the national electrical industry

5

Winner of the Prof. Jabbehdar educational award

6

IUT Distinguished Research Award for Authorship: 2011

7

Tribute to three faculty members as elites in Information technology and communications of the province

8

Two times winner of the best B. Sc. supervisor

9

Three times winner of best lecturer at IUT

10

Three times winner of the best masters' and PhD theses at IUT

11

Winner of national and international RoboCup competitions

12

First rank: National RoboCup Competition, 2007

13

Second Rank: International RoboCup Competition, Germany 2009

14

Third rank: National RoboCup Competition, 2007

15

Fifth Rank: International RoboCup Competition, Japan 2017

16

Third Rank:
International Challenge
RoboCup Competition,
Japan 2017

17

Second rank:
National RoboCup
Competition, 2018

18

Second Rank:
International RoboCup
Competition, Portugal 2019

19

Second Rank:
International RoboCup
Asia-Pacific Competition,
2018

20

IUT Distinguished Research
Award for Authorship: 2011

21

Winner of the best
industrial cooperation
award

22

Winner of the best
industrial cooperation
award

23

Selected as the distin-
guished IEEE student
branch twice

24

Several times winner of
ACM Student Competi-
tion

25

Fifth Rank:
ACM/ICPC Asia Region,
2015

26

Third Rank:
ACM ICPC Challenge, 2015

27

Fourth Rank:
ACM/ICPC Asia Region, 2016

28

First Rank:
ACM ICPC Challenge, 2016

29

Second Rank:
IOT CUP Hackathon

30

Silver Medal:
International Olympiad
on Micro Electronics

31


Third Rank:
National Cybersecurity
Competition



Research Areas

- 
- Control and Automation
 - Advanced Control
 - Robotics
 - Power Electronics and Drives
 - Microelectronics
 - Photonics
 - Microwave and Antenna
 - Cryptography and Security
 - Switching
 - Wireless and Mobile Computing
 - Network Security
 - Digital Signal Processing
 - Image Processing
 - Machine Vision
 - Information Theory and Coding
 - Bioinformatics
 - Data Mining
 - Hardware Engineering
 - Artificial Intelligence
 - Pattern Recognition
 - Machine Learning
 - Embedded Systems
 - Internet of Things and Sensor Networks
 - Biomedical Engineering- Bioelectric
 - Computational Neuroscience
 - Game Theory
 - Renewable Energies

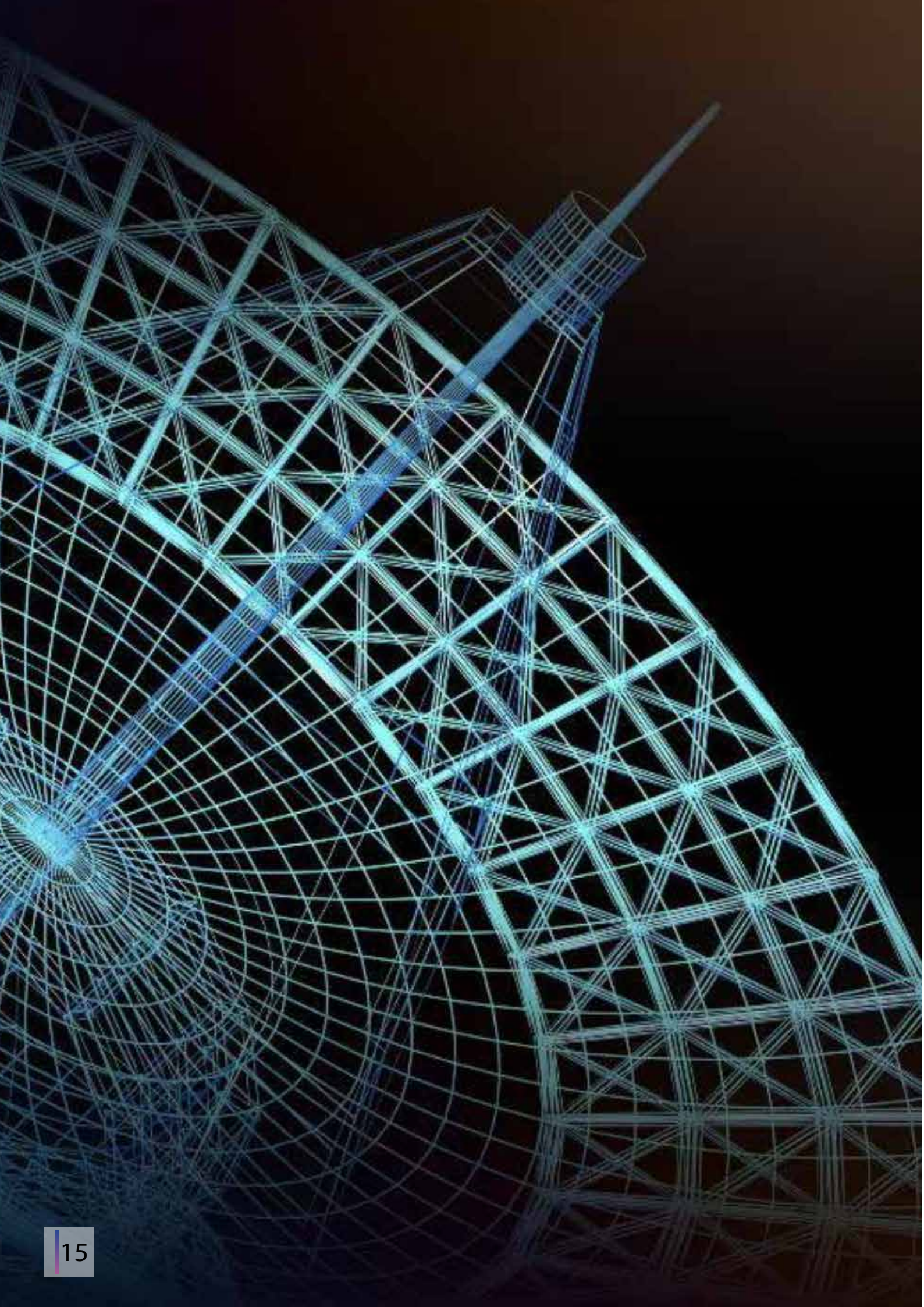


- 
- 42 funded research projects
 - 307 ISI publications
 - More than 20 National and International Patents
 - 29 state-of-the art research labs
 - Various industrial collaborations with:
 - Isfahan's Mobarakeh Steel Company
 - Iran Telecommunication Research Center
 - Isfahan Regional Electric Company

Events, Workshops and Conferences



- 
- Hosting three startup weekend events to motivate and support innovative startup ideas in the fields of electrical and computer engineering and information technology.
 - Hosting the national student contest on smart grids.
 - Hosting the cybersecurity festival four times.
 - Annual laboratory safety workshops for B.Sc. students.
 - Annual advanced laboratory safety workshops for graduate students.
 - The 10th Iraninan Conference on Machine Vision and Image Processing, 2017.
 - The 1st West Asian Colloquium on Optical Wireless Communications, 2018
 - The 6th Iranian Conference on Radar and Surveillance Systems, 2019
 - The fourth avionics conference 2019.





Labs

- 25 research and educational Labs
- Covering diverse areas within ECE
- Giving service to more than 500 students each year





We would like to express our sincere thanks to the faculty members at the Department of Electrical and Computer Engineering, and our colleagues at International Scientific Cooperation Center (ISCC) for sincere assistance in producing this prospectus.

 Tel: **+98 (31) 33912505-6**
 Fax: **+98 (31) 33912511**
 Email: **international@iut.ac.ir**
 Website: **www.international.iut.ac.ir/en**

 Instagram: **IUT_International**
 Telegram: **IUT_International**
 LinkedIn: **Isfahan University of Technology**



Published by: International Scientific Cooperation Center,
Isfahan University of Technology, Isfahan, Iran. 84156-83111

