Faculty of Information Technology and Electrical Engineering
ITEE

Dean Jukka Riekkki
Education Dean Jari Iinatti
June 2020
STRONG ACTOR IN ICT FIELD

CRITICAL MASS IN OUR RESEARCH FOCUS AREAS
- Ability to execute on very demanding problems
- Multi-disciplinary expertise resulting in new innovations

COMPETENCE CUMULATION
- Experienced senior researchers
- Each professor has a seasoned team

OFFERING STABLE ENVIRONMENT
- Seasoned in winning funding
- Excellent local and international networks

HIGH-QUALITY EDUCATION
- Competent workforce for companies, research institutions, and public sector

MULTI-DISCIPLINARY ICT RESEARCH

FACULTY OF ITEE
- 12 INTERNATIONALLY ACCLAIMED GROUPS
- 40 SENIOR RESEARCH FELLOWS
- 50 PROFESSORS

STRONG PORTFOLIO OF RESEARCH PROJECTS
- Well-balanced between fundamental and applied research
- Long R&D tradition with local and international companies

INTERNATIONAL FUNDING
- 35M€ ANNUAL FUNDING
- 35PHD DEGREES ANNUALLY
- 150MSC DEGREES ANNUALLY

150 PROJECTS
12 INTERNATIONALLY ACCLAIMED GROUPS
50 PROFESSORS
40 SENIOR RESEARCH FELLOWS
600 EXPERTS
ITEE RESEARCH FORMS A SOLUTION CREATION VALUE CHAIN
6G Enabled Wireless Smart Society & Ecosystem

- National Flagship for 2018-2026
- Volume 251M€
- Operated by University of Oulu
- Collaboration with Nokia, VTT, Aalto University, BusinessOulu, OUAS.

1. Wireless Connectivity
   Ultra-reliable low-latency communications
   Enabling Unmanned Processes

2. Devices & Circuits
   THz communications materials & circuits
   Enabling Unlimited Connectivity

3. Distributed Computing
   Mobile edge intelligence
   Enabling Time Critical & Trusted Apps

4. Services & Applications
   Multidisciplinary research across verticals
   Enabling Disruptive Value Networks

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6G Flagship was selected as Finland’s high-tech Flagship, by Finnish Government through Academy of Finland

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ITEE Study Programmes

Main Disciplines

Electronics and Communications Engineering
- Study programme (5 years)
- Master programme (2 years)
- International master programmes (2 years)

Computer Science and Engineering:
- Study programme (5 years)
- Master programme (2 years)
- International master programme (2 years)

Information Processing Science
- Study programme (5 years)
- Master programme (2 years)
- International master programme (2 years)

These degree programmes will take care of you now on!

ITEE Units

- CAS: CIRCUITS AND SYSTEMS
- MIC: MICROMECHANICS
- OPEM: OPTO-ELECTRONICS AND MEASUREMENT TECHNIQUES
- CWC-NS: CWC - NETWORKS AND SYSTEMS
- CWC-RT: CWC - RADIO TECHNOLOGIES
- AC: APPLIED AND COMPUTATIONAL MATHEMATICS
- BISS: BIOMIMETICS AND INTELLIGENT SYSTEMS
- CMVS: CENTER FOR MACHINE VISION AND SIGNAL ANALYSIS
- UBICOMP: UBIQUITOUS COMPUTING
- INTERACT: HUMAN COMPUTER INTERACTION AND HUMAN-CENTERED DEVELOPMENT
- M3S: EMPIRICAL SOFTWARE ENGINEERING IN SOFTWARE, SYSTEMS AND SERVICES
- OASIS: OULU ADVANCED RESEARCH ON SERVICE AND INFORMATION SYSTEMS

Biomedical Engineering
- Master programme (2 y)
- International Master Programme (2 y)
  - With Faculty of Medicine

Business Analytics
- International Master Programme (2 years)

EDUCATION EXPORT: Bachelor programme in Software Engineering with NJIT (3 y)
  - With Nanjing Institute of Technology

With Business School
ITEE Study Programmes with intakes 2021 onwards

FIVE-YEAR PROGRAMS IN FINNISH BACHELOR + MASTER DEGREE

Computer Science and Engineering (100), now 85
- Applied Computing
- Artificial Intelligence
- Computer Engineering

Electronics and Communications Engineering (85)
- Electronics Design
- Electronics, Materials and Components
- Communications Engineering
- Photonics and Measuring Technology
- RF Engineering

Information Processing Science (150), now 130
- Information Systems
- Software Engineering

Master programmes (Finnish call)
- BME (20+3 via open path, with Faculty of Medicine)
- CSE (20)
- ECE (20)
- IPS (40, of which 10 via open path)

INTERNATIONAL MASTER’S PROGRAMS

BA\(^1\) Business Analytics (15+15) (+ 20 in Business School)
BME\(^2\) Biomedical Engineering: Signal and Image Processing (30 with Faculty of Medicine)
CSE\(^2\) Computer Science and Engineering (50)
ELE\(^2\) Electronics (30)
GS3D\(^2\) Software, Systems and Services in the Global Environment + DD-EMSE (45+15)
WCE\(^2\) Wireless Communications Engineering + 2 DD-programmes (30+10)

INTERNATIONAL BACHELOR PROGRAM

DICE International Degree Programme in Digitalization, Computing and Electronics (DICE)\(^2\) (48)

EDUCATION EXPORT

Software Engineering with NJIT (100 => 100)

\(^1\) Tuition fee: 13 k€, Scholarships: 0% (1\(^{st}\) year), 100% 2\(^{nd}\) year
\(^2\) Tuition fee: 10 k€, Scholarships: 75%
Remember to

- Follow the guidelines by study programmes, tutors, etc.
- Work hard all the time (during days)
- Ask if problems: teachers are helpful despite their hurries
- Think critically
- Enjoy