ICTE
Innovative Communication Technologies and Entrepreneurship

KANDIDATDAG 2022
INTRODUCTION

MSc in Engineering programme

Two options:

- ICTE without specialisation

- Nordic Master in Sustainable ICT Solutions
  - Specialisation under the ICTE programme
  - Double Degree programme between AAU and Lappeenranta University of Technology (LUT), Finland
INTRODUCTION

• Valdemar Batory Østergaard (student on ICTE)
  • Diplomingeniør DTU, Process and Innovation (BEng)
  • https://www.linkedin.com/in/valdemosrostergaard/

• Why choose Innovative Communication Technologies and Entrepreneurship?
  • To understand how Information and Communication Technologies (ICT) can create value, meet user needs and provide new business opportunities
  • To understand and be a part of digital transformation

• Meet Robert: https://youtu.be/ucPbKMW-axM
INTRODUCTION

• Jacobo Domingo Gil
  • BSc. Robotics Engineering (AAU)
  • https://www.linkedin.com/in/jacobo-domingo-gil-b4b302122/

• Why choose the Nordic Master in Sustainable ICT Solutions?
  • To understand better the nexus that connects technology and sustainability and how it can contribute to stopping the climate crisis.
INNOVATIVE COMMUNICATION TECHNOLOGIES AND ENTREPRENEURSHIP

- The education gives you knowledge about the newest developments within information-, communication- and media technologies in a global perspective.
- You will understand the social, market and ethical aspects of their applications.

Learn about:
- Value creation using ICT
- Service- and business development
- User experience and computer ethics
- Key technologies: Internet and web technologies, cloud technologies, 5G, machine learning, security and trust
- Digital transformation, privacy and identity management
MASTER IN ICTE

- 2-year engineering programme (English)
- 50% courses, 50% project work

<table>
<thead>
<tr>
<th>4</th>
<th>ICTE4 MSc thesis project</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Managerial economics &amp; Entrepreneurship</td>
</tr>
<tr>
<td></td>
<td>Green ICT – Sustainable business development</td>
</tr>
<tr>
<td></td>
<td>Algorithmic content exposure</td>
</tr>
<tr>
<td></td>
<td>Enterprise security and compliance</td>
</tr>
<tr>
<td></td>
<td>Privacy engineering</td>
</tr>
<tr>
<td></td>
<td>ICTE3 Project: Advanced ICT solutions</td>
</tr>
<tr>
<td></td>
<td>ICTE3 Project: Sustainable digital transformation</td>
</tr>
<tr>
<td>2</td>
<td>User experience &amp; Computer ethics</td>
</tr>
<tr>
<td></td>
<td>Identity and access management</td>
</tr>
<tr>
<td></td>
<td>Machine learning</td>
</tr>
<tr>
<td></td>
<td>Internet services &amp; governance</td>
</tr>
<tr>
<td></td>
<td>ICTE2 Project: ICT service development: Design &amp; Architectures</td>
</tr>
<tr>
<td>1</td>
<td>Innovation &amp; business models</td>
</tr>
<tr>
<td></td>
<td>Internet technologies &amp; service architectures</td>
</tr>
<tr>
<td></td>
<td>Communication systems</td>
</tr>
<tr>
<td></td>
<td>Scientific methods</td>
</tr>
<tr>
<td></td>
<td>ICTE1 Project (analysis): Services &amp; Platforms</td>
</tr>
</tbody>
</table>

KANDIDATDAG 2022
MASTER IN ICTE

- 1st and 2nd semester courses are locked
- 3rd semester is flexible
  - study abroad, academic internship or long master thesis
  - 1 mandatory course
- 4th semester: master thesis
# A WEEK IN THE LIFE OF AN ICTE STUDENT

<table>
<thead>
<tr>
<th>Time</th>
<th>Mon</th>
<th>Tue</th>
<th>Wed</th>
<th>Thu</th>
<th>Fri</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morning</td>
<td>Project work</td>
<td>Project work</td>
<td>Project work</td>
<td>Communication Systems (CS)</td>
<td>Project work</td>
</tr>
<tr>
<td>Lunch break</td>
<td>Lunch break</td>
<td>Lunch break</td>
<td>Lunch break</td>
<td>Lunch break</td>
<td>Lunch break</td>
</tr>
<tr>
<td>Afternoon</td>
<td>Innovation and business models (IBM)</td>
<td>Internet technologies &amp; service architectures (ITSA)</td>
<td>Project work</td>
<td>Project work</td>
<td>Project work</td>
</tr>
</tbody>
</table>
Nordic Master in Sustainable ICT solutions

• Offered in cooperation with Lappeenranta University of Technology (LUT), Finland.
• The programme combines the software engineering education of LUT with the ICT engineering education of AAU.
• Includes a first mandatory semester stay in the LUT Campus in Lappeenranta.
# Nordic Master in Sustainable ICT solutions

<table>
<thead>
<tr>
<th>4</th>
<th>ICTE4 MSc thesis project</th>
</tr>
</thead>
</table>
| 3 | **Green ICT**  
   - Sustainable business development |
|   | Managerial economics & Entrepreneurship  
   - Privacy engineering  
   - Algorithmic content exposure  
   - Internet technologies & service architectures  
   - Communication systems |
|   | ICTE3 Project: Sustainable digital transformation |
| 2 | **User experience**  
   & Computer ethics |
|   | Identity and access management  
   - Machine learning  
   - Internet services & governance |
|   | ICTE2 Project:  
   ICT service development: Design & Architectures for Sustainability |
| 1 | LUT courses:  
   - Introduction to sustainability (3 ECTS)  
   - Requirements engineering (6 ECTS)  
   - Research design and methods (6 ECTS) |
|   | LUT semester project:  
   Services & Platforms  
   - Theme: ICT solutions for SDGs |
Application and requirements

• Qualifying bachelor’s programmes:
  • IT, Communication and New Media (AAU Cph)
  • Cyber- og computerteknologi (AAU Cph)
  • Elektronik og Systemdesign (AAU)
  • Computerteknologi (AAU)
  • Software (AAU)
  • Softwareteknologi (DTU)
  • Netværksteknologi og IT (DTU)
  • IT-Elektronik (DTU)
  • IT og økonomi (DTU)

• Applicants with other backgrounds will receive individual assessment by the Study Board of Electronics and IT.
STUDY ENVIRONMENT

- Wednesday café and Friday bar
- Cyber-club, hacker-days, kayaking etc.
- Activities across study programmes
- Read more: https://www.en.aau.dk/education/campus-cities/copenhagen
JOB OPPORTUNITIES

- Consultancy, policy making or environmental engineering positions
- Developer, software architect, IT consultant, product owner, management consultant
- Innovative services for the digital society
- Assessment of new ICT technologies, ICT strategy work, consultancy, business development
QUESTIONS?

Read more about ICTE:
Innovative Communication Technologies and Entrepreneurship - MSc in Engineering - Aalborg University (aau.dk)

Contact Anna and Daniel, study guidance
cph-guidance@es.aau.dk

Coordinators:
- Henning Olesen, associate professor
  olesen@es.aau.dk (ICTE)
- Reza Tadayoni, associate professor
  reza@es.aau.dk (Nordic Master specialisation)