

INTERNATIONAL SEMESTERS

Academic year 2021-2022

School of ICT

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International semester in Embedded Systems is available only autumn or full academic year.

Autumn semester 2021 (end of August - mid December)

| Embedded Systems * (needs to be taken as a whole) | | | |
|---------------------------------------------------|-------------|--------------|----------------------------------------------------------|
| Course name + link to study guide | Course code | ECTS credits | Prerequisites / quota of students / weekly schedule etc. |
| Sensors and signal conditioning | 5051229 | 5 | |
| Electronics | 5051225 | 5 | |
| VHDL | 5051158 | 5 | |
| IoT Essentials | 5051224 | 5 | |
| IoT Big Data and Analytics | 5000BL72 | 5 | |
| IoT Security | TT00B024 | 5 | |
| Total | | 30 | |

*Prerequisites: Fundamental skills in Mathematics, Computer architecture and Programming. The semester courses are mainly 3rd year ICT engineering (B.Eng.) courses. It is possible to join the semester only for the autumn part, or for full academic year. ECS network students / double degree students have priority to join the semester.

| Game Development * (needs to be taken as a whole) | | | |
|---------------------------------------------------|-------------|--------------|----------------------------------------------------------|
| Course name + link to study guide | Course code | ECTS credits | Prerequisites / quota of students / weekly schedule etc. |
| Game Development Essentials | 5051259 | 5 | |
| Object-oriented Programming | 5051125 | 5 | |
| Intro to Game Development Tools | 5051234 | 5 | |
| Gamification and Serious Games | 5051235 | 5 | |

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|----------------------------------------------------------------------------------------|------------------------|-----------|--|
| Game Mathematics and Algorithms or 2D Game Graphics | 5051236 or TE00BL90 | 5 or 5 | |
| Game Physics and Algorithms or 3D Game Graphics | 5051233 or TE00BL91 | 5 or 5 | |
| Total | | 30 | |

*Prerequisites: Fundamental skills in Mathematics, Computer Science, Programming and/or Graphical Design (2D/3D). The semester courses are mainly 3rd year ICT engineering (B.Eng.) courses.

(* Choose either Game Mathematics and Algorithms and Game Physics and Algorithms or 2D Game Graphics and 3D Game Graphics

| ICT Projects and Cybersecurity * (needs to be taken as a whole) | | | |
|-----------------------------------------------------------------|-------------|--------------|---------------------------------------------------------------------------------------------|
| Course name + link to study guide | Course code | ECTS credits | Prerequisites / quota of students / weekly schedule etc. |
| Innovation Project (*) | TE00BL66 | 10 | no limit |
| Information Security | 3011366 | 5 | max 10 students |
| Network Security | 3011468 | 5 | Prerequisites: Linux, TCP/IP, servers, scripting; max 10 students |
| Introduction to ICT Projects | TE00BR81 | 10 | max 10 students |
| Application Security | 3011640 | 5 | Prerequisites: Application programming, Information security; max 5 students |
| Introduction to Digitalization (**) | TT00BG06 | 5 | no limit |
| Total | | 40 | |

*Prerequisites: Fundamental skills in Office applications, Programming and Operating systems. The semester courses are mainly 3rd year Business ICT (B.BA.) courses.

(* Innovation Project can be done either Autumn or Spring semester. If students take part in both semesters, Innovation Project should be completed during Spring.

(** Introduction to Digitalization course is a virtual course that starts in January. However, you may join in the already started course during Autumn.

Spring semester 2022 (January - end of April)

| Embedded Systems * (needs to be taken as a whole) | | | |
|-----------------------------------------------------------------|-------------|--------------|----------------------------------------------------------|
| Course name + link to study guide | Course code | ECTS credits | Prerequisites / quota of students / weekly schedule etc. |
| Embedded Linux | 5051227 | 15 | |
| Innovation Project | TE00BL66 | 10 | |
| Introduction to Digitalization (virtual course) | TT00BG06 | 5 | |
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| | | | |
| Total | | 30 | |

*Prerequisites: Fundamental skills in Mathematics, Computer architecture and Programming. The semester courses are mainly 3rd year ICT engineering (B.Eng.) courses. It is possible to join the semester only for the autumn part, or for full academic year. ECS network students / double degree students have priority to join the semester.

| Game Development * (needs to be taken as a whole) | | | |
|---------------------------------------------------|-------------|--------------|----------------------------------------------------------|
| Course name + link to study guide | Course code | ECTS credits | Prerequisites / quota of students / weekly schedule etc. |
| Advanced UX and UI Technologies | 5051238 | 5 | |
| Serious Games Project | 5051239 | 10 | |
| Innovation Project | TE00BL66 | 10 | |
| 3D Modelling | TE00BG30 | 5 | |
| | | | |
| | | | |
| Total | | 30 | |

*Prerequisites: Fundamental skills in Mathematics, Computer Science, Programming and/or Graphical Design (2D/3D). The semester courses are mainly 3rd year ICT engineering (B.Eng.) courses.

| ICT Projects and Cybersecurity * (needs to be taken as a whole) | | | |
|-----------------------------------------------------------------|-------------|--------------|----------------------------------------------------------|
| Course name + link to study guide | Course code | ECTS credits | Prerequisites / quota of students / weekly schedule etc. |
| Innovation Project (*) | TE00BL66 | 10 | no limit |
| Data Protection and Privacy | 3011580 | 5 | max 10 students |
| Information Security Risk Management | 3011369 | 5 | max 10 students |
| Introduction to Digitalization (**) | TT00BG06 | 5 | no limit |
| Project Management | TE00BR83 | 5 | no limit |
| Total | | 30 | |

*Prerequisites: Fundamental skills in Office applications, Programming and Operating systems. The semester courses are mainly 3rd year Business ICT (B.BA.) courses.

(* Innovation Project can be done either Autumn or Spring semester. If students take part in both semesters, Innovation Project should be completed during Spring.

(** Introduction to Digitalization course is a virtual course that starts in January. However, you may join in the already started course during Autumn.