

INTERNATIONAL SEMESTERS

Academic year 2023-2024

School of ICT

Contact: Ms. Anne Räikkä: anne.raikka@turkuamk.fi International semester in Embedded Systems is available only autumn or full academic year.

Autumn semester 2023 (end of August - mid December)

Embedded Systems * (needs to be take			
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	
<u>IoT Essentials</u>	5051224	5	
IoT Big Data and Analytics	5000BL72	5	
<u>IoT Security</u>	TT00BO24	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	



Game Mathematics and Algorithms or	5051236 or	5 or 5	
2D Game Graphics	TE00BL90		
Game Physics and Algorithms or	5051233 or	5 or 5	
3D Game Graphics	TE00BL91		
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
Introduction to ICT Projects	TE00BR81	10	max 10 students
Application Security	3011640	5	Prerequisites: Application programming, Information security; max 5 students
Total		25	

^{*}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.



Spring semester 2024 (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	
Cryptology	5051156	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.
Advanced UX and UI Technologies	5051238	5	
Serious Games Project	5051239	10	
Innovation Project	TE00BL66	10	
3D Modelling or Project Course in Game	TE00BG30	5 or 5	
Development	5051237		
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 3D Modelling or Project Course in Game Development



ICT Projects and Cybersecurity * (needs to be			
Course name + link to study guide	Course code	ECTS credits	Prerequisites / quota of students / weekly schedule etc.
Innovation Project (*	TE00BL66	10	no limit
Network Security	TE00BL63	5	max 5 students
Information Security Testing and Assessment	5051244	5	max 5 students
Operational Security	5051245	5	max 5 students
<u>Project Management</u>	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.