

BACHELOR CURRICULUM – MAJORS EE & AT – 2023/2024

BEFORE REVISION

Basic courses EE & AT					
Code	Course	EC	Year	Q	Timeslot
2WBBO	Calculus 2	5	1	1	A/B/C
3NBBO	Applied natural sciences	5	1	2	A/B
2IABO	Data analytics for engineers	5	1	3	B
0SABO	USE	5	1	4	A/C/E
4WBBO	Engineering design	5	2	1	C

BEP EE & AT					
Code	Course	EC	Year	Q	Timeslot
5XECO	Final bachelor project (BEP)	10	3	3 & 4	X
5XEDO	Extension final bachelor project (BEP)	5	3	3 & 4	X

Major courses EE					
Code	Course	EC	Year	Q	Timeslot
5EE01	Safety and health, first year instr.	0	1	1	X
5ECA0	Circuits	5	1	1	C
5EIA0	Computation I: hardware/software int.	5	1	1	E
5ESE0	Signal processing basics (Signals I)	5	1	2	A
5ECB0	Electronic circuits 1	5	1	3	C
2DE20	Mathematics I	5	1	3	E
5ESB0	Systems	5	1	4	B
5EPA0	Electromagnetics I	5	2	1	D
5EWB0	Electrical power systems	5	2	2	B
5EWA0	Electromechanics	5	2	2	C
5ECC0	Electronic circuits 2	5	2	2	D
5EIB0	Computation II: embedded system design	5	2	3	C
5ETA0	Intro telecommunications	5	2	3	E
5EPB0	Electromagnetics II	5	2	4	C
5EMA0	Mathematics II	5	2	4	E
5ESCO	DSP fundamentals (signals II)	5	3	1	B
5ESD0	Control systems	5	3	1	C
5ETB0	Communication theory	5	3	2	B

See the document 'overview transitional arrangements 2023-2024' for information about courses that are not taught anymore

Major courses AT					
Code	Course	EC	Year	Q	Timeslot
5EE01	Safety and health, first year instr.	0	1	1	X
5ATA0	Spectrum of automotive	5	1	1	A&D
5EIA0	Computation I: hardware/software int.	5	1	1	E
5ESE0	Signal processing basics (Signals I)	5	1	2	A
5ASC0	Dynamics for automotive applications	5	1	3	C
2DE20	Mathematics I	5	1	3	E
5ESB0	Systems	5	1	4	B
5EPA0	Electromagnetics I	5	2	1	D
5EWA0	Electromechanics	5	2	2	C
5XCA0	Fundamentals of electronics	5	2	2	E
4AUB10	Electric & hybrid vehicle powertrain design	5	2	3	C
5APA0	Power electronics	5	2	3	D
4AUB20	Road vehicle dynamics	5	2	4	D
5AIB0	Sensing computing & actuating	5	2	4	E
5AIC0	Vehicle networking	5	3	1	B
5ESD0	Control systems	5	3	1	C
2IWA0	Automotive software engineering	5	3	2	B
5AID0	DBL Auton. vehicles conquering the world	5	3	2	D

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Electives EE & AT					
Code	Course	EC	Category	Q	Timeslot
5XEBO	Student project in EE or AU	5	2 Deepening	YEAR	X
5XSCO	DBL Autom.design pr electr.differential	5	2 Deepening	1	A
5XPCO	Neurophysiology and neurostimulation	5	2 Deepening	2	A
5XICO	DBL Electronic Systems Engineering	5	2 Deepening	2	E
5XSHO	Cognitive neuroscience	5	2 Deepening	3	D2
5XSJO	Automotive sensing	5	3 Advanced	1	E
5XTBO	Photonics	5	3 Advanced	1	E
5XSL0	Fundamentals of machine learning	5	3 Advanced	2	A
5XWCO	Energy management	5	3 Advanced	2	A
5XSM0	MRI for the brain	5	3 Advanced	1	A
5XSEO	Information theory	5	3 Advanced	3	A
5XWBO	Electric drive systems	5	3 Advanced	3	B
5XCBO	Electronic and photonic components	5	3 Advanced	3	D
5XSK0	Data fusion & semantic interpretation	5	3 Advanced	3	E
5XTCO	Components in wireless technologies	5	3 Advanced	3	E
5XCC0	Biopotential and neural interface circuits	5	3 Advanced	3	E
5XSA0	Introduction to medical image processing	5	3 Advanced	4	A
5XWFO	CBL Wireless Energy Transfer	5	3 Advanced	4	A
5XTA0	Telecommunications systems	5	3 Advanced	4	B
5XWGO	Power system computation & simulation	5	3 Advanced	4	C
5XIFO	Neuro computation	5	3 Advanced	4	D
5XSD0	Medical ultrasound	5	3 Advanced	4	E
5XIE0	Computational modeling	5	3 Advanced	4	E
5XPBO	Nano devices and integration	5	3 Advanced	4	E
5XWA0	Power system analysis and optimization	5	3 Advanced	4	E
5XSN0	Monitoring brain functions in healthcare	5	3 Advanced	4	E

USE Electives EE & AT					
Code	Course	EC	Category	Q	Timeslot
5JEU0A0	From idea to a blueprint	5	1 Introductory	1	A
5JUS0A0	Concept vs reality	5	2 Deepening	2	A
5JUA0A0	Validation to sales	5	3 Advanced	3	A

Electives EE & AT: only examination					
Code	Course	EC	Category	Q	Timeslot
5XFA0	DBL Rock your baby	5	1 Introductory	2	C & D
5XIA0	DBL Automotive design project energy	5	1 Introductory	2	E
5XIB0	DBL Venus exploration	5	1 Introductory	4	D

Coherent packages EE & AT
System design & analysis
Machine learning and information processing for communications
Intelligent vehicles: communication, sensing and perception
Introduction in electrical engineering
Introduction in automotive
Electric & hybrid vehicles
Care & cure
Neuro engineering
Connected world
Electrical power conversion and delivery
Neuro system design
<i>Please be aware that not all coherent packages can be completed anymore due to the new Bachelor college curriculum</i>

USE learning line EE & AT
Internet of things