

Applied Physics and Electrical Engineering - International, M Sc in Engineering

300 credits

Civilingenjör i teknisk fysik och elektroteknik -

internationell

6CYYI

Valid from: 2014 Spring semester

Determined by Board of Studies for Electrical Engineering, Physics and Mathematics

Date determined

Entry requirements

Degree in Swedish

Civilingenjör 300 hp och Teknologie master 120 hp



Curriculum

Semester 6 (Spring 2017)

Course name	Credits	Level	Timetable module	ECV
Modern Physics I	4	G2X	3	С
Automatic Control	6	G2X	1	С
Applied Physics - Bachelor Project	16*	G2E	2	E
Electronics Engineering - Bachelor Project	16*	G2X	2	E
Probability, first course	4	G1X	4	С
Industrial Economics, Basic Course	6	G1X	2	Е
Modern Physics II	4	G2X	1	E
Applied Physics - Bachelor Project	16*	G2E	-	Е
Electronics Engineering - Bachelor Project	16*	G2X	-	E
Signals, Information and Communication	4	G2X	3	E
	Modern Physics I Automatic Control Applied Physics - Bachelor Project Electronics Engineering - Bachelor Project Probability, first course Industrial Economics, Basic Course Modern Physics II Applied Physics - Bachelor Project Electronics Engineering - Bachelor Project	Modern Physics I4Automatic Control6Applied Physics - Bachelor Project16*Electronics Engineering - Bachelor Project16*Probability, first course4Industrial Economics, Basic Course6Modern Physics II4Applied Physics - Bachelor Project16*Electronics Engineering - Bachelor Project16*	Modern Physics I4G2XAutomatic Control6G2XApplied Physics - Bachelor Project16*G2EElectronics Engineering - Bachelor Project16*G2XProbability, first course4G1XIndustrial Economics, Basic Course6G1XModern Physics II4G2XApplied Physics - Bachelor Project16*G2EElectronics Engineering - Bachelor Project16*G2E	Course nameCreditsLevelImoduleModern Physics I4G2X3Automatic Control6G2X1Applied Physics - Bachelor Project16*G2E2Electronics Engineering - Bachelor Project16*G1X2Probability, first course4G1X4Industrial Economics, Basic Course6G1X2Modern Physics II4G2X1Applied Physics - Bachelor Project16*G2E2Electronics Engineering - Bachelor Project16*G2X1

Semester 7 (Autumn 2017)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TEIK18	Chinese for Engineers III	6*	G2X	-	С
TAMS22	Probability Theory and Bayesian Networks	6	A1X	2	E
TAMS32	Stochastic Processes	6	A1X	1	E
TAMS46	Probability Theory, Second Course	6	A1X	3	E
TAOP34	Large Scale Optimization	6	A1X	3	E
TATA34	Real Analysis, Honours Course	6	G2X	4	E
TATA55	Abstract Algebra	6	G2X	3	E
TATM85	Functional Analysis	6*	A1X	2	E
TBME04	Anatomy and Physiology	6	G2X	3	E
TBMI19	Medical Information Systems	6*	A1X	2	E
TDDC17	Artificial Intelligence	6	G2X	3	E
TDDD38	Advanced Programming in C++	6*	A1X	2	E



TDTS06Computer Networks6G2X1ETFFM08Experimental Physics6*A1X1ETFFY54Quantum Mechanics6A1X2ETFYA40Analytical Mechanics6A1X4ETFYA43Nanotechnology6G2X3ETFYA77Fundamentals in Materials Science6A1X2ETFYA88Additive Manufacturing: Tools, Materials and Methods6A1N3ETMKM90Engineering Materials - Deformation and Fracture6G2X4ETSB06Multidimensional Signal Analysis6A1X4ETSB08Digital Image Processing6A1X4ETSFS09Modelling and Control of Engines and Drivelines6A1X4ETSR515Detection and Estimation of Signals6A1X2ETSR62Modelling and Simulation6A1X3ETSF12Design of Digital Systems6A1X3ETSTE36Digital Integrated Circuits6A1X3ETAMS38Experimental Design and Biostatistics6A1X3ETAMS38Experimental Design and Biostatistics6A1X3ETAMS38Experimental Design and Biostatistics6A1X3ETAMS38Experimental Design and Biostatistics6A1X3ETAMS38 <t< th=""><th>Course code</th><th>Course name</th><th>Credits</th><th>Level</th><th>Timetable module</th><th>ECV</th></t<>	Course code	Course name	Credits	Level	Timetable module	ECV
TFFY54Quantum Mechanics6A1X2ETFYA40Analytical Mechanics6A1X4ETFYA40Analytical Mechanics6A1X4ETFYA43Nanotechnology6G2X3ETFYA477Fundamentals in Materials Science6A1X2ETFYA88Additive Manufacturing: Tools, Materials and Methods6A1X2ETFYA88Additive Manufacturing: Tools, Materials and Methods6A1X4ETFYE17Corporate Finance6G2X4ETSB806Multidimensional Signal Analysis6A1X2ETSB808Digital Image Processing6A1X4ETSFS09Modelling and Control of Engines and Drivelines6A1X4ETSK515Detection and Estimation of Signals6A1X2ETSR162Modelling and Simulation6A1X3ETSTE20Digital Integrated Circuits6A1X3ETSTE86Digital Integrated Circuits6A1X2EPeriod 2TTTETTAMS38Experimental Design and Biostatistics6A1X4ETATA34Real Analysis, Honours Course6G2X3ETATA34Real Analysis, Honours Course6G2X3ETATA34Real Analysis, Honours Course6<	TDTS06	Computer Networks	6	G2X	1	E
TFYA40Analytical Mechanics6A1X4ETFYA43Nanotechnology6G2X3ETFYA43Nanotechnology6G2X3ETFYA477Fundamentals in Materials Science6A1X2ETFYA88Additive Manufacturing: Tools, Materials and Methods6A1X2ETFYA88Additive Manufacturing: Tools, Materials and Methods6A1X4ETPPE17Corporate Finance6G2X4ETSB806Multidimensional Signal Analysis6A1X4ETSDT14Signal Theory6A1X4ETSDT24Signal Theory6A1X4ETSK509Digital Communication6A1X4ETSK515Detection and Estimation of Signals6A1X2ETSRT62Modelling and Simulation6A1X3ETSTE12Design of Digital Systems6A1X2EPeriod 2TTTETTAMS38Experimental Design and Biostatistics6A1X4ETAMS38Experimental Design and Biostatistics6A1X4ETATA31Ordinary Differential Equations and Dynamical Systems6*A1X1ETATA55Abstract Algebra6G2X3ETATA55Functional Analysis6*A1X1E	TFFM08	Experimental Physics	6*	A1X	1	E
TFYA43Nanotechnology6G2X3ETFYA77Fundamentals in Materials Science6A1X2ETFYA88Additive Manufacturing: Tools, Materials and Methods6A1N3ETMKM90Engineering Materials - Deformation and Fracture6A1X4ETPPE17Corporate Finance6G2X4ETSB806Multidimensional Signal Analysis6A1X2ETSB808Digital Image Processing6A1X4ETSD114Signal Theory6A1X1ETSFS09Modelling and Control of Engines and Drivelines6A1X4ETSK515Detection and Estimation of Signals6A1X2ETSTE22Design of Digital Systems6A1X3ETSTE36Digital Integrated Circuits6A1X3ETSTE86Digital Integrated Circuits6A1X2EPeriod 2TCCCTTAMS38Experimental Design and Biostatistics6A1X4ETAAS38Experimental Design and Biostatistics6A1X4ETAA34Real Analysis, Honours Course6G2X3ETATA55Abstract Algebra6G2X3ETATA55Abstract Algebra6G2X3ETATA55Functional Analysis6*A1X <t< td=""><td>TFFY54</td><td>Quantum Mechanics</td><td>6</td><td>A1X</td><td>2</td><td>E</td></t<>	TFFY54	Quantum Mechanics	6	A1X	2	E
TFYA77Fundamentals in Materials Science6A1X2ETFYA88Additive Manufacturing: Tools, Materials and Methods6A1N3ETMKM90Engineering Materials - Deformation and Fracture6A1X4ETPPE17Corporate Finance6G2X4ETSB806Multidimensional Signal Analysis6A1X2ETSB808Digital Image Processing6A1X4ETSF14Signal Theory6A1X1ETSFS09Modelling and Control of Engines and Drivelines6A1X4ETSK501Digital Communication6A1X4ETSK15Detection and Estimation of Signals6A1X3ETSTE12Design of Digital Systems6A1X3ETSTE86Digital Integrated Circuits6A1X1ETAMS38Experimental Design and Biostatistics6A1X4ETAMS38Experimental Design and Biostatistics6A1X4ETATA34Real Analysis, Honours Course6G2X4ETATA34Real Analysis, Honours Course6G2X3ETATA55Abstract Algebra6G2X3ETATA55Abstract Algebra6G2X3ETATA55Functional Analysis6*A1X1ETATM85Functional Analysis <td>TFYA40</td> <td>Analytical Mechanics</td> <td>6</td> <td>A1X</td> <td>4</td> <td>E</td>	TFYA40	Analytical Mechanics	6	A1X	4	E
TFYA88Additive Manufacturing: Tools, Materials and Methods6A1N3ETMKM90Engineering Materials - Deformation and Fracture6A1X4ETPPE17Corporate Finance6G2X4ETSB06Multidimensional Signal Analysis6A1X2ETSB08Digital Image Processing6A1X4ETSDT14Signal Theory6A1X1ETSFS09Modelling and Control of Engines and Drivelines6A1X4ETSK501Digital Communication6A1X2ETSR62Modelling and Simulation6A1X3ETSTE12Design of Digital Systems6A1X3ETEIK18Chinese for Engineers III6*G2X-CTAMS38Experimental Design and Biostatistics6A1X1ETAOP04Mathematical Optimization6A1X4ETATA34Real Analysis, Honours Course6G2X3ETATA34Real Analysis, Honours Course6G2X3ETATA71Ordinary Differential Equations and Dynamical Systems6A1X1ETATM85Functional Analysis6*A1X1E	TFYA43	Nanotechnology	6	G2X	3	E
IPTA88Methods6A1N3ETMKM90Engineering Materials - Deformation and Fracture6A1X4ETPPE17Corporate Finance6G2X4ETSB806Multidimensional Signal Analysis6A1X2ETSB808Digital Image Processing6A1X4ETSDT14Signal Theory6A1X1ETSF509Modelling and Control of Engines and Drivelines6A1X4ETSK501Digital Communication6A1X2ETSRT62Modelling and Simulation6A1X3ETSTE12Design of Digital Systems6A1X3ETSTE86Digital Integrated Circuits6A1X2EPeriod 2TCTTETAMS38Experimental Design and Biostatistics6A1X3ETAN904Mathematical Optimization6A1X4ETATA34Real Analysis, Honours Course6G2X4ETATA34Real Analysis, Honours Course6G2X3ETATA71Ordinary Differential Equations and Dynamical Systems6*A1X1ETATM85Functional Analysis6*A1X1E	TFYA77	Fundamentals in Materials Science	6	A1X	2	E
INKM90Fracture6A1X4ETPPE17Corporate Finance6G2X4ETSB06Multidimensional Signal Analysis6A1X2ETSB08Digital Image Processing6A1X4ETSDT14Signal Theory6A1X1ETSF309Modelling and Control of Engines and Drivelines6A1X4ETSK501Digital Communication6A1X4ETSK515Detection and Estimation of Signals6A1X2ETSTE12Design of Digital Systems6A1X3ETSTE86Digital Integrated Circuits6A1X2EPeriod 2TEIK18Chinese for Engineers III6*G2X-CTAMS38Experimental Design and Biostatistics6A1X3ETAOP04Mathematical Optimization6G2X3ETATA34Real Analysis, Honours Course6G2X3ETATA55Abstract Algebra6G2X3ETATA71Ordinary Differential Equations and Dynamical Systems6*A1X1ETATM85Functional Analysis6*A1X1E	TFYA88	-	6	A1N	3	E
TSBB06Multidimensional Signal Analysis6A1X2ETSBB08Digital Image Processing6A1X4ETSDT14Signal Theory6A1X1ETSFS09Modelling and Control of Engines and Drivelines6A1X4ETSK501Digital Communication6A1X4ETSK515Detection and Estimation of Signals6A1X3ETSTE12Design of Digital Systems6A1X3ETSTE86Digital Integrated Circuits6A1X2EPeriod 2ETAMS38Experimental Design and Biostatistics6A1X3ETATA34Real Analysis, Honours Course6G2X4ETATA55Abstract Algebra6G2X3ETATA71Ordinary Differential Equations and Dynamical Systems6*A1X1ETATM85Functional Analysis6*A1X1E	ТМКМ90		6	A1X	4	E
TSBB08Digital Image Processing6A1X4ETSDT14Signal Theory6A1X1ETSF09Modelling and Control of Engines and Drivelines6A1X4ETSK501Digital Communication6A1X4ETSK515Detection and Estimation of Signals6A1X2ETSRT62Modelling and Simulation6A1X3ETSTE12Design of Digital Systems6A1X3ETSTE86Digital Integrated Circuits6A1X2EPeriod 2TAMS17Statistical Theory, advanced course6A1X1ETAMS38Experimental Design and Biostatistics6A1X3ETATA34Real Analysis, Honours Course6G2X3ETATA71Ordinary Differential Equations and Dynamical Systems6A1X1ETATM85Functional Analysis6*A1X1E	TPPE17	Corporate Finance	6	G2X	4	E
TSDT14Signal Theory6A1X1ETSF509Modelling and Control of Engines and Drivelines6A1X4ETSK501Digital Communication6A1X4ETSK515Detection and Estimation of Signals6A1X2ETSRT62Modelling and Simulation6A1X3ETSTE12Design of Digital Systems6A1X3ETSTE86Digital Integrated Circuits6A1X2EPeriod 2TEIK18Chinese for Engineers III6*G2X-CTAMS17Statistical Theory, advanced course6A1X3ETAOP04Mathematical Optimization6A1X4ETATA34Real Analysis, Honours Course6G2X3ETATA55Abstract Algebra6G2X3ETATA71Ordinary Differential Equations and Dynamical Systems6*A1X1ETATM85Functional Analysis6*A1X1E	TSBB06	Multidimensional Signal Analysis	6	A1X	2	E
TSFS09Modelling and Control of Engines and Drivelines6A1X4ETSKS01Digital Communication6A1X4ETSKS15Detection and Estimation of Signals6A1X2ETSRT62Modelling and Simulation6A1X3ETSTE12Design of Digital Systems6A1X3ETSTE86Digital Integrated Circuits6A1X2EPeriod 2TEIK18Chinese for Engineers III6*G2X-CTAMS17Statistical Theory, advanced course6A1X3ETAOP04Mathematical Optimization6A1X4ETATA34Real Analysis, Honours Course6G2X4ETATA55Abstract Algebra6G2X3ETATA71Ordinary Differential Equations and Dynamical Systems6*A1X1ETATM85Functional Analysis6*A1X1E	TSBB08	Digital Image Processing	6	A1X	4	E
TSFS09Drivelines6A1X4ETSKS01Digital Communication6A1X4ETSKS15Detection and Estimation of Signals6A1X2ETSRT62Modelling and Simulation6A1X3ETSTE12Design of Digital Systems6A1X3ETSTE86Digital Integrated Circuits6A1X2EPeriod 2TEIK18Chinese for Engineers III6*G2X-CTAMS17Statistical Theory, advanced course6A1X3ETAOP04Mathematical Optimization6A1X4ETATA34Real Analysis, Honours Course6G2X4ETATA55Abstract Algebra6G2X3ETATA71Ordinary Differential Equations and Dynamical Systems6*A1X1ETATM85Functional Analysis6*A1X1E	TSDT14	Signal Theory	6	A1X	1	E
TSKS15Detection and Estimation of Signals6A1X2ETSRT62Modelling and Simulation6A1X3ETSTE12Design of Digital Systems6A1X3ETSTE86Digital Integrated Circuits6A1X2EPeriod 2TEIK18Chinese for Engineers III6*G2X-CTAMS17Statistical Theory, advanced course6A1X3ETAMS38Experimental Design and Biostatistics6A1X3ETAOP04Mathematical Optimization6A1X4ETATA34Real Analysis, Honours Course6G2X3ETATA55Abstract Algebra6G2X3ETATA71Ordinary Differential Equations and Dynamical Systems6*A1X1ETATM85Functional Analysis6*A1X1E	TSFS09		6	A1X	4	E
TSRT62Modelling and Simulation6A1X3ETSTE12Design of Digital Systems6A1X3ETSTE86Digital Integrated Circuits6A1X2EPeriod 2TEIK18Chinese for Engineers III6*G2X-CTAMS17Statistical Theory, advanced course6A1X3ETAMS38Experimental Design and Biostatistics6A1X3ETAOP04Mathematical Optimization6A1X4ETATA34Real Analysis, Honours Course6G2X3ETATA55Abstract Algebra6G2X3ETATA71Ordinary Differential Equations and Dynamical Systems6*A1X1ETATM85Functional Analysis6*A1X1E	TSKS01	Digital Communication	6	A1X	4	E
TSTE12Design of Digital Systems6A1X3ETSTE86Digital Integrated Circuits6A1X2EPeriod 2TEIK18Chinese for Engineers III6*G2X-CTAMS17Statistical Theory, advanced course6A1X1ETAMS38Experimental Design and Biostatistics6A1X3ETAOP04Mathematical Optimization6A1X4ETATA34Real Analysis, Honours Course6G2X3ETATA55Abstract Algebra6G2X3ETATA71Ordinary Differential Equations and Dynamical Systems6*A1X1ETATM85Functional Analysis6*A1X1E	TSKS15	Detection and Estimation of Signals	6	A1X	2	Е
TSTE86Digital Integrated Circuits6A1X2EPeriod 2TEIK18Chinese for Engineers III6*G2X-CTAMS17Statistical Theory, advanced course6A1X1ETAMS38Experimental Design and Biostatistics6A1X3ETAOP04Mathematical Optimization6A1X4ETATA34Real Analysis, Honours Course6G2X4ETATA55Abstract Algebra6G2X3ETATA71Ordinary Differential Equations and Dynamical Systems6*A1X1ETATM85Functional Analysis6*A1X1E	TSRT62	Modelling and Simulation	6	A1X	3	E
Period 2TEIK18Chinese for Engineers III6*G2X-CTAMS17Statistical Theory, advanced course6A1X1ETAMS38Experimental Design and Biostatistics6A1X3ETAOP04Mathematical Optimization6A1X4ETATA34Real Analysis, Honours Course6G2X4ETATA55Abstract Algebra6G2X3ETATA71Ordinary Differential Equations and Dynamical Systems6*A1X1ETATM85Functional Analysis6*A1X1E	TSTE12	Design of Digital Systems	6	A1X	3	E
TEIK18Chinese for Engineers III6*G2X-CTAMS17Statistical Theory, advanced course6A1X1ETAMS38Experimental Design and Biostatistics6A1X3ETAOP04Mathematical Optimization6A1X4ETATA34Real Analysis, Honours Course6G2X4ETATA55Abstract Algebra6G2X3ETATA71Ordinary Differential Equations and Dynamical Systems6*A1X1ETATM85Functional Analysis6*A1X1E	TSTE86	Digital Integrated Circuits	6	A1X	2	Е
TAMS17Statistical Theory, advanced course6A1X1ETAMS38Experimental Design and Biostatistics6A1X3ETAOP04Mathematical Optimization6A1X4ETATA34Real Analysis, Honours Course6G2X4ETATA55Abstract Algebra6G2X3ETATA71Ordinary Differential Equations and Dynamical Systems6G2X3ETATM85Functional Analysis6*A1X1ETATM85Functional Analysis6A1X1E	Period 2					
TAMS38Experimental Design and Biostatistics6A1X3ETAOP04Mathematical Optimization6A1X4ETATA34Real Analysis, Honours Course6G2X4ETATA55Abstract Algebra6G2X3ETATA71Ordinary Differential Equations and Dynamical Systems6G2X3ETATM85Functional Analysis6*A1X1ETATM85Functional Analysis6A1X1E	TEIK18	Chinese for Engineers III	6*	G2X	-	С
TAOP04Mathematical Optimization6A1X4ETATA34Real Analysis, Honours Course6G2X4ETATA55Abstract Algebra6G2X3ETATA71Ordinary Differential Equations and Dynamical Systems6G2X3ETATM85Functional Analysis6*A1X1ETATM85Functional Analysis6A1X1E	TAMS17	Statistical Theory, advanced course	6	A1X	1	E
TATA34Real Analysis, Honours Course6G2X4ETATA55Abstract Algebra6G2X3ETATA71Ordinary Differential Equations and Dynamical Systems6G2X3ETATM85Functional Analysis6*A1X1ETATM85Functional Analysis6A1X1E	TAMS38	Experimental Design and Biostatistics	6	A1X	3	E
TATA55Abstract Algebra6G2X3ETATA71Ordinary Differential Equations and Dynamical Systems6G2X3ETATM85Functional Analysis6*A1X1ETATM85Functional Analysis6A1X1E	TAOP04	Mathematical Optimization	6	A1X	4	E
TATA71Ordinary Differential Equations and Dynamical Systems6G2X3ETATM85Functional Analysis6*A1X1ETATM85Functional Analysis6A1X1E	TATA34	Real Analysis, Honours Course	6	G2X	4	E
TATA/1Systems6G2X3ETATM85Functional Analysis6*A1X1ETATM85Functional Analysis6A1X1E	TATA55	Abstract Algebra	6	G2X	3	Е
TATM85 Functional Analysis 6 A1X 1 E	TATA71		6	G2X	3	E
	TATM85	Functional Analysis	6*	A1X	1	E
TBME03 Biochemistry and Cell Biology 6 G2X 2 E	TATM85	Functional Analysis	6	A1X	1	E
	TBME03	Biochemistry and Cell Biology	6	G2X	2	E



TBMI19Medical Information Systems6*A1X3	E
TBMI19Medical Information Systems6A1X3	E
TBMT01 Biomedical Signal Processing 6 A1X 1	E
TDDD38 Advanced Programming in C++ 6* A1X -	E
TDTS08Advanced Computer Architecture6A1X2	E
TEAE05Resource Theory6G1X1	E
TFFM08Experimental Physics6*A1X1	Е
TFFM08Experimental Physics6A1X1	E
TFFY70Physics of Condensed Matter part I6A1X2	Е
TFYA20Surface Physics6A1X4	E
TFYA28Quantum Dynamics6A1X1	E
TFYA39Semiconductor Technology6A1X3	Е
TFYA60Astronomy and Geophysics6G1F3	E
TGTU04Leadership6G2X2	E
TGTU49History of Technology6G1F3	E
TKMJ24Environmental Engineering6G1X3	E
TMHL03Mechanics of Light Structures6A1X3	Е
TMMS07Biomechanics6A1X4	E
TMMV18Fluid Mechanics6A1X2	Е
TMMV54Computational Heat Transfer6A1X1	E
TPPE29Financial Markets and Instruments6A1X2	E
TSBB06Multidimensional Signal Analysis6A1X3	Е
TSBB09 Image Sensors 6 A1X 4	E
TSEA81Computer Engineering and Real-time Systems6A1X4	Е
TSEK02 Radio Electronics 6 A1X 3	E
TSEK37 Analog CMOS Integrated Circuits 6 A1X 1	E
TSFS02 Vehicle Dynamics and Control 6 A1X 1	E
TSFS09 Modelling and Control of Engines and 6 A1X 3 Drivelines	E
TSIN02 Internetworking 6 A1N 1	E
TSIT02 Computer Security 6 G2F 2	E
TSKS01 Digital Communication 6 A1X 4	E



Course code	Course name	Credits	Level	Timetable module	ECV
TSKS11	Networks: Models, Algorithms and Applications	6	G2X	3	E
TSRT78	Digital Signal Processing	6	A1X	2	E

Specialisation: Applied Mathematics

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TAMS32	Stochastic Processes	6	A1X	1	С
TAMS46	Probability Theory, Second Course	6	A1X	3	E
TAOP34	Large Scale Optimization	6	A1X	3	E
TATA55	Abstract Algebra	6	G2X	3	E
TFYA40	Analytical Mechanics	6	A1X	4	E
TSKS15	Detection and Estimation of Signals	6	A1X	2	E
Period 2					
TATM85	Functional Analysis	6	A1X	1	С
TAOP04	Mathematical Optimization	6	A1X	4	E
TATA55	Abstract Algebra	6	G2X	3	E
TATA71	Ordinary Differential Equations and Dynamical Systems	6	G2X	3	E

Specialisation: Biomedical Engineering

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TBME04	Anatomy and Physiology	6	G2X	3	С
TBMI19	Medical Information Systems	6*	A1X	2	E
TSDT14	Signal Theory	6	A1X	1	E
Period 2					
TBMT01	Biomedical Signal Processing	6	A1X	1	С
TBME03	Biochemistry and Cell Biology	6	G2X	2	E
TBMI19	Medical Information Systems	6*	A1X	3	E



Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TSDT14	Signal Theory	6	A1X	1	С
TSKS01	Digital Communication	6	A1X	4	С
TDTS06	Computer Networks	6	G2X	1	E
TSKS15	Detection and Estimation of Signals	6	A1X	2	E
Period 2					
TSKS01	Digital Communication	6	A1X	4	С
TSEK02	Radio Electronics	6	A1X	3	E
TSIN02	Internetworking	6	A1N	1	E
TSKS11	Networks: Models, Algorithms and Applications	6	G2X	3	E
TSRT78	Digital Signal Processing	6	A1X	2	E

Specialisation: Communication

Specialisation: Control and Information Systems

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TSRT62	Modelling and Simulation	6	A1X	3	С
TSDT14	Signal Theory	6	A1X	1	E
TSFS09	Modelling and Control of Engines and Drivelines	6	A1X	4	E
TSKS15	Detection and Estimation of Signals	6	A1X	2	E
Period 2					
TSEA81	Computer Engineering and Real-time Systems	6	A1X	4	
TSRT78	Digital Signal Processing	6	A1X	2	С
TSFS02	Vehicle Dynamics and Control	6	A1X	1	E
TSFS09	Modelling and Control of Engines and Drivelines	6	A1X	3	E



Specialisation: Electronics

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TSKS01	Digital Communication	6	A1X	4	С
TSTE86	Digital Integrated Circuits	6	A1X	2	С
TSTE12	Design of Digital Systems	6	A1X	3	E
Period 2					
TSEK37	Analog CMOS Integrated Circuits	6	A1X	1	С
TSKS01	Digital Communication	6	A1X	4	С
TSEK02	Radio Electronics	6	A1X	3	E

Specialisation: Financial Mathematics

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TAMS32	Stochastic Processes	6	A1X	1	С
TPPE17	Corporate Finance	6	G2X	4	С
TAMS46	Probability Theory, Second Course	6	A1X	3	Е
TATM85	Functional Analysis	6*	A1X	2	E
Period 2					
TAOP04	Mathematical Optimization	6	A1X	4	E
TATM85	Functional Analysis	6*	A1X	1	E
TPPE29	Financial Markets and Instruments	6	A1X	2	E



Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TFFM08	Experimental Physics	6*	A1X	1	С
TFFY54	Quantum Mechanics	6	A1X	2	С
TFYA40	Analytical Mechanics	6	A1X	4	Е
TFYA43	Nanotechnology	6	G2X	3	Е
Period 2					
TFFM08	Experimental Physics	6*	A1X	1	С
TFFM08	Experimental Physics	6	A1X	1	С
TFFY70	Physics of Condensed Matter part I	6	A1X	2	С
TFYA20	Surface Physics	6	A1X	4	E
TFYA39	Semiconductor Technology	6	A1X	3	E

Specialisation: Materials and Nano Physics

Specialisation: Mechatronics

Course name	Credits	Level	Timetable module	ECV
Modelling and Control of Engines and Drivelines	6	A1X	4	E
Modelling and Simulation	6	A1X	3	E
Computer Engineering and Real-time Systems	6	A1X	4	С
Vehicle Dynamics and Control	6	A1X	1	E
Modelling and Control of Engines and Drivelines	6	A1X	3	E
Digital Signal Processing	6	A1X	2	E
	Modelling and Control of Engines and Drivelines Modelling and Simulation Computer Engineering and Real-time Systems Vehicle Dynamics and Control Modelling and Control of Engines and Drivelines	Modelling and Control of Engines and Drivelines 6 Modelling and Simulation 6 Computer Engineering and Real-time Systems 6 Vehicle Dynamics and Control 6 Modelling and Control of Engines and Drivelines 6	Modelling and Control of Engines and Drivelines6A1XModelling and Simulation6A1XComputer Engineering and Real-time Systems6A1XVehicle Dynamics and Control6A1XModelling and Control of Engines and Drivelines6A1X	Course nameCreditsLevelImmoduleModelling and Control of Engines and Drivelines6A1X4Modelling and Simulation6A1X3Computer Engineering and Real-time Systems6A1X4Vehicle Dynamics and Control6A1X1Modelling and Control of Engines and Drivelines6A1X3



Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TSBB06	Multidimensional Signal Analysis	6	A1X	2	С
TSBB08	Digital Image Processing	6	A1X	4	С
TSDT14	Signal Theory	6	A1X	1	С
Period 2					
TSBB06	Multidimensional Signal Analysis	6	A1X	3	С
TSBB09	Image Sensors	6	A1X	4	С
TSRT78	Digital Signal Processing	6	A1X	2	С

Specialisation: Signal and Image Processing

Specialisation: System-on-Chip

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TSTE12	Design of Digital Systems	6	A1X	3	С
TSTE86	Digital Integrated Circuits	6	A1X	2	С
TDTS06	Computer Networks	6	G2X	1	E
TSKS01	Digital Communication	6	A1X	4	E
Period 2					
TDTS08	Advanced Computer Architecture	6	A1X	2	С
TFYA39	Semiconductor Technology	6	A1X	3	E
TSEA81	Computer Engineering and Real-time Systems	6	A1X	4	E
TSEK02	Radio Electronics	6	A1X	3	E
TSEK37	Analog CMOS Integrated Circuits	6	A1X	1	E
TSKS01	Digital Communication	6	A1X	4	E



Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TFFY54	Quantum Mechanics	6	A1X	2	С
TFYA40	Analytical Mechanics	6	A1X	4	С
TATA75	Theory of Relativity	6	A1X	-	E
TFYA43	Nanotechnology	6	G2X	3	E
Period 2					
TFYA28	Quantum Dynamics	6	A1X	1	С
TATA75	Theory of Relativity	6	A1X	3	E
TFFY70	Physics of Condensed Matter part I	6	A1X	2	E
TFYA57	Relativistic Quantum Mechanics	6	A1X	3	E

Specialisation: Theory, Modelling and Visualization

Semester 8 (Spring 2018)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TAMS29	Stochastic Processes Applied to Financial Models	6	A1X	3	E
TANA15	Numerical Linear Algebra	6	A1X	1	E
TATA27	Partial Differential Equations	6	A1X	2	E
TATA53	Linear Algebra, Honours Course	6*	G2X	-	E
TATA54	Number Theory	6*	G2X	-	E
TATA66	Fourier and Wavelet Analysis	6*	A1X	4	E
TATA78	Complex Analysis, second course	6*	A1X	2	E
TBMI01	Medical Decision Support	6	A1X	4	E
TBMI03	Medical Information Models and Ontologies	6	A1X	4	E
TBMI26	Neural Networks and Learning Systems	6	A1X	2	E
TBMT02	Medical Imaging	6	A1F	3	E
TBMT09	Physiological Pressures and Flows	6	A1X	1	E
TDDD76	Software Engineering Project	8*	G2X	2	E
TDTS07	System Design and Methodology	6	A1X	1	E
TEIO20	Entrepreneurship and New Business Development	6*	G2X	4	E



Course code	Course name	Credits	Level	Timetable module	ECV
TFFM40	Analytical Methods in Materials Science	6*	A1X	1	E
TFYA04	Materials Optics	6	A1X	4	E
TFYA21	Physical Metallurgy	6	A1F	3	E
TFYA25	Physics of Condensed Matter part II	6	A1X	2	E
TFYA36	Chaos and Non-Linear Phenomena	6*	A1X	3	E
TFYA71	Cosmology	6*	A1X	3	E
TFYA85	Alternative Energy Sources and their Applications	6	G2X	4	E
TFYY67	Classical Electrodynamics	6	A1X	1	E
TGTU01	Technology and Ethics	6	G1X	1	E
TGTU91	Oral and Written Communication	6	G1X	2	E
TKMJ10	Industrial Ecology	6	A1X	1	E
TKMJ15	Environmental Management Strategies	6	G1F	3	E
TMME55	Flight Dynamics	6	A1X	1	E
TMMS30	Multi Body Dynamics and Robotics	6	A1X	3	E
TNM048	Information Visualisation	6	A1X	3	E
TPPE32	Financial Risk Management	6	A1X	2	E
TSBB15	Computer Vision	12*	A1X	1	E
TSBK07	Computer Graphics	6*	A1X	4	E
TSBK08	Data Compression	6	A1N	2	E
TSEK06	VLSI Design	12*	A1X	4	E
TSEK38	Radio Frequency Transceiver Design	6	A1X	2	E
TSFS04	Electrical Drives	6	G2X	4	E
TSKS13	Wireless Communications	6	A1F	4	E
TSRT07	Industrial Control Systems	6	A1X	2	E
TSRT09	Control Theory	6	A1X	3	E
TSTE08	Analog and Discrete-Time Integrated Circuits	6	A1X	3	E
TSTE14	Analog Filters	6	A1X	2	E
TSTE93	Analog Circuits	6*	G2F	1	E
Period 2					
TANA31	Computational Methods for Ordinary and Partial Differential Equations	6	A1X	2	E
TAOP24	Optimization, Advanced Course	6	G2X	1	E



Course code	Course name	Credits	Level	Timetable module	ECV
TATA53	Linear Algebra, Honours Course	6*	G2X	-	E
TATA54	Number Theory	6*	G2X	-	E
TATA66	Fourier and Wavelet Analysis	6*	A1X	2	E
TATA78	Complex Analysis, second course	6*	A1X	3	E
TBME08	Biomedical Modeling and Simulation	6	A1X	3	E
TBMT26	Technology in Intensive Care and Surgery	6	A1X	1	E
TDDC78	Programming of Parallel Computers - Methods and Tools	6	A1X	3	E
TDDD12	Database Technology	6	G2X	4	E
TDDD76	Software Engineering Project	8*	G2X	2	E
TEAE13	Civil and Commercial Law	6	G1X	2	E
TEIE44	Intellectual Property Rights	4	G1X	1	E
TEIO20	Entrepreneurship and New Business Development	6*	G2X	4	E
TFFM40	Analytical Methods in Materials Science	6*	A1X	1	E
TFMT19	Chemical Sensor Systems	6	A1X	4	E
TFYA19	Quantum Computers	6	A1X	4	E
TFYA36	Chaos and Non-Linear Phenomena	6*	A1X	2	E
TFYA38	Optoelectronics	6	A1X	3	E
TFYA41	Thin Film Physics	6	A1X	2	E
TFYA71	Cosmology	6*	A1X	2	E
TGTU76	Philosophy of Science	6	G1X	4	E
TKMJ29	Resource Efficient Products	6	A1N	1	E
TNM079	Modelling and Animation	6	A1X	2	E
TPPE33	Portfolio Management	6	A1X	2	E
TSBB15	Computer Vision	12*	A1X	3	E
TSBK02	Image and Audio Coding	6	A1X	4	E
TSBK07	Computer Graphics	6*	A1X	1	E
TSEK06	VLSI Design	12*	A1X	4	E
TSFS03	Vehicle Propulsion Systems	6	A1X	3	E
TSFS06	Diagnosis and Supervision	6	A1N	1	E
TSFS11	Electrical and Energy Technology	6	G2F	4	E
TSKS14	Multiple Antenna Communications	6	A1F	2	E



Course code	Course name	Credits	Level	Timetable module	ECV
TSRT14	Sensor Fusion	6	A1X	2	E
TSTE06	Digital Filters	6	A1X	3	E
TSTE87	Application-Specific Integrated Circuits	6	A1X	2	E
TSTE93	Analog Circuits	6*	G2F	1	E

Specialisation: Applied Mathematics

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TANA15	Numerical Linear Algebra	6	A1X	1	С
TATA27	Partial Differential Equations	6	A1X	2	E
TATA66	Fourier and Wavelet Analysis	6*	A1X	4	E
TSRT09	Control Theory	6	A1X	3	E
Period 2					
TAOP24	Optimization, Advanced Course	6	G2X	1	С
TATA66	Fourier and Wavelet Analysis	6*	A1X	2	E
TFYA19	Quantum Computers	6	A1X	4	E

Specialisation: Biomedical Engineering

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TBMT02	Medical Imaging	6	A1F	3	С
TBMT09	Physiological Pressures and Flows	6	A1X	1	С
TBMI01	Medical Decision Support	6	A1X	4	Е
TBMI03	Medical Information Models and Ontologies	6	A1X	4	E
TBMI26	Neural Networks and Learning Systems	6	A1X	2	Е
Period 2					
TBME08	Biomedical Modeling and Simulation	6	A1X	3	E
TBMT26	Technology in Intensive Care and Surgery	6	A1X	1	E



Specialisation: Communication

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TSBK08	Data Compression	6	A1N	2	E
TSEK38	Radio Frequency Transceiver Design	6	A1X	2	E
TSKS13	Wireless Communications	6	A1F	4	E
Period 2					
TFYA19	Quantum Computers	6	A1X	4	E
TSBK02	Image and Audio Coding	6	A1X	4	E
TSKS14	Multiple Antenna Communications	6	A1F	2	E

Specialisation: Control and Information Systems

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TSRT07	Industrial Control Systems	6	A1X	2	С
TSRT09	Control Theory	6	A1X	3	С
Period 2					
TDDD12	Database Technology	6	G2X	4	C/E
TDDC78	Programming of Parallel Computers - Methods and Tools	6	A1X	3	E
TSFS06	Diagnosis and Supervision	6	A1N	1	E
TSRT14	Sensor Fusion	6	A1X	2	E



Specialisation: Electronics

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TSTE08	Analog and Discrete-Time Integrated Circuits	6	A1X	3	С
TSEK06	VLSI Design	12*	A1X	4	C/E
TSEK38	Radio Frequency Transceiver Design	6	A1X	2	Е
TSTE14	Analog Filters	6	A1X	2	E
TSTE93	Analog Circuits	6*	G2F	1	E
Period 2					
TSTE87	Application-Specific Integrated Circuits	6	A1X	2	С
TSEK06	VLSI Design	12*	A1X	4	C/E
TSTE06	Digital Filters	6	A1X	3	E
TSTE93	Analog Circuits	6*	G2F	1	E

Specialisation: Financial Mathematics

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TAMS29	Stochastic Processes Applied to Financial Models	6	A1X	3	С
TANA15	Numerical Linear Algebra	6	A1X	1	С
TPPE32	Financial Risk Management	6	A1X	2	Е
Period 2					
TAOP24	Optimization, Advanced Course	6	G2X	1	E
TPPE33	Portfolio Management	6	A1X	2	E



Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TFFM40	Analytical Methods in Materials Science	6*	A1X	1	С
TFYA04	Materials Optics	6	A1X	4	E
TFYA21	Physical Metallurgy	6	A1F	3	E
TFYA25	Physics of Condensed Matter part II	6	A1X	2	E
Period 2					
TFFM40	Analytical Methods in Materials Science	6*	A1X	1	С
TFMT19	Chemical Sensor Systems	6	A1X	4	E
TFYA38	Optoelectronics	6	A1X	3	E
TFYA41	Thin Film Physics	6	A1X	2	E

Specialisation: Materials and Nano Physics

Specialisation: Mechatronics

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TMME55	Flight Dynamics	6	A1X	1	E
TMMS30	Multi Body Dynamics and Robotics	6	A1X	3	E
TSFS04	Electrical Drives	6	G2X	4	E
TSRT07	Industrial Control Systems	6	A1X	2	E
TSRT09	Control Theory	6	A1X	3	E
Period 2					
TSFS03	Vehicle Propulsion Systems	6	A1X	3	E
TSFS06	Diagnosis and Supervision	6	A1N	1	E
TSRT14	Sensor Fusion	6	A1X	2	E



Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TBMI26	Neural Networks and Learning Systems	6	A1X	2	Е
TBMT02	Medical Imaging	6	A1F	3	E
TNM048	Information Visualisation	6	A1X	3	E
TSBB15	Computer Vision	12*	A1X	1	E
TSBK07	Computer Graphics	6*	A1X	4	E
TSBK08	Data Compression	6	A1N	2	E
Period 2					
TSBB15	Computer Vision	12*	A1X	3	E
TSBK02	Image and Audio Coding	6	A1X	4	E
TSBK07	Computer Graphics	6*	A1X	1	E
TSRT14	Sensor Fusion	6	A1X	2	E

Specialisation: Signal and Image Processing

Specialisation: System-on-Chip

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TDTS07	System Design and Methodology	6	A1X	1	С
TSEK06	VLSI Design	12*	A1X	4	C/E
TSBK07	Computer Graphics	6*	A1X	4	E
TSTE08	Analog and Discrete-Time Integrated Circuits	6	A1X	3	E
Period 2					
TSEK06	VLSI Design	12*	A1X	4	C/E
TEIE44	Intellectual Property Rights	4	G1X	1	E
TSBK07	Computer Graphics	6*	A1X	1	E
TSTE06	Digital Filters	6	A1X	3	E
TSTE87	Application-Specific Integrated Circuits	6	A1X	2	E



Course code	Course name	Credits	Level	Timetable module	ECV	
Period 1						
TFYY67	Classical Electrodynamics	6	A1X	1	С	
TATA27	Partial Differential Equations	6	A1X	2	E	
TFYA21	Physical Metallurgy	6	A1F	3	E	
TFYA25	Physics of Condensed Matter part II	6	A1X	2	E	
TFYA36	Chaos and Non-Linear Phenomena	6*	A1X	3	E	
TFYA71	Cosmology	6*	A1X	3	E	
ТЅВКО7	Computer Graphics	6*	A1X	4	E	
Period 2						
TFYA19	Quantum Computers	6	A1X	4	E	
TFYA36	Chaos and Non-Linear Phenomena	6*	A1X	2	E	
TFYA71	Cosmology	6*	A1X	2	E	
TSBK07	Computer Graphics	6*	A1X	1	E	

Specialisation: Theory, Modelling and Visualization

Semester 9 (Autumn 2018)

Course name	Credits	Level	Timetable module	ECV
Multivariate Statistical Methods	6	A1X	4	Е
Discrete Mathematics	8*	G1X	3	Е
Project - Applied Mathematics	12*	A1X	4	Е
Theory of Relativity	6*	A1X	-	E
Biomedical Engineering - Project Course	12*	A1X	4	Е
Biomedical Optics	6	A1X	1	Е
Software Engineering	12*	A1X	1	Е
Fundamentals of Chemistry	6	G1X	2	Е
Advanced Project Work in Applied Physics	6*	A1X	-	Е
Mathematical Methods of Physics	6	A1X	3	Е
Analytical Mechanics	6	A1X	2	Е
Project course in Computational Physics CDIO	12*	A1X	4	E
Quantum Structures: Photonics and Transport	6	A1X	1	E
	Multivariate Statistical Methods Discrete Mathematics Project - Applied Mathematics Theory of Relativity Biomedical Engineering - Project Course Biomedical Optics Software Engineering Fundamentals of Chemistry Advanced Project Work in Applied Physics Mathematical Methods of Physics Analytical Mechanics Project course in Computational Physics CDIO	Multivariate Statistical Methods6Discrete Mathematics8*Project - Applied Mathematics12*Theory of Relativity6*Biomedical Engineering - Project Course12*Biomedical Optics6Software Engineering12*Fundamentals of Chemistry6Advanced Project Work in Applied Physics6*Mathematical Methods of Physics6Analytical Mechanics6Project course in Computational Physics CDIO12*	Multivariate Statistical Methods6A1XDiscrete Mathematics8*G1XProject - Applied Mathematics12*A1XTheory of Relativity6*A1XBiomedical Engineering - Project Course12*A1XBiomedical Optics6A1XSoftware Engineering12*A1XFundamentals of Chemistry6G1XAdvanced Project Work in Applied Physics6*A1XMathematical Methods of Physics6A1XProject course in Computational Physics CDIO12*A1X	Course nameCreditsLevelmoduleMultivariate Statistical Methods6A1X4Discrete Mathematics8*G1X3Project - Applied Mathematics12*A1X4Theory of Relativity6*A1X-Biomedical Engineering - Project Course12*A1X4Biomedical Optics6A1X1Software Engineering12*A1X1Fundamentals of Chemistry6G1X2Advanced Project Work in Applied Physics6*A1X-Mathematical Methods of Physics6A1X3Analytical Mechanics6A1X2Project course in Computational Physics CDIO12*A1X4



Course code	Course name	Credits	Level	Timetable module	ECV
TFYA92	Project Course in Applied Physics, CDIO	12*	A1X	4	E
TMES09	Industrial Energy Systems	6	A1X	3	E
TMMS11	Models of Mechanics	6*	A1X	3	E
TMMV01	Aerodynamics	6	A1X	2	E
TNE071	Microwave Engineering	6	A1X	1	E
TNE089	Electromagnetic Compatibility (EMC) and Printed Circuit Board (PCB) Design	6*	A1X	2	E
TNM067	Scientific Visualization	6	A1X	3	E
TPPE53	Financial Valuation Methodology	6	A1X	2	E
TSBB11	Images and Graphics, Project Course CDIO	12*	A1X	4	E
TSBB17	Visual Object Recognition and Detection	6	A1X	2	E
ТЅВКОЗ	Advanced Game Programming	6*	A1X	1	E
TSEA26	Design of Embedded DSP Processor	6	A1X	1	E
TSEA84	Digital Design Project	6*	A1X	3	E
TSEK03	Radio Frequency Integrated Circuits	6	A1X	2	E
TSEK11	Evaluation of an Integrated Circuit	2	A1X	4	E
TSIN01	Information Networks	6	A1X	3	E
TSIT03	Cryptology	6	A1X	2	E
TSKS05	Communication Systems, Project Course	12*	A1X	4	E
TSKS12	Modern Channel Coding, Inference and Learning	6	A1N	1	E
TSRT10	Automatic Control - Project Course	12*	A1X	4	E
TSTE17	System Design	12*	A1F	4	E
TSTE25	Power Electronics	6	A1X	3	E
Period 2					
TATA32	Discrete Mathematics	8*	G1X	1	E
TATA62	Project - Applied Mathematics	12*	A1X	4	E
TATA75	Theory of Relativity	6*	A1X	3	E
TBMI02	Medical Image Analysis	6	A1X	1	E
TBMT14	Biomedical Engineering - Project Course	12*	A1X	4	E
TDDC88	Software Engineering	12*	A1X	1	E
TDDD49	Programming in C# and .NET Framework	4	G2X	3	E
TDDD56	Multicore and GPU Programming	6	A1X	2	E



Course code	Course name	Credits	Level	Timetable module	ECV
TFYA17	Advanced Project Work in Applied Physics	6*	A1X	-	E
TFYA27	Elementary Particle Physics	6	A1X	2	E
TFYA28	Quantum Dynamics	6	A1X	1	E
TFYA50	Project course in Computational Physics CDIO	12*	A1X	4	E
TFYA57	Relativistic Quantum Mechanics	6	A1X	2	E
TFYA92	Project Course in Applied Physics, CDIO	12*	A1X	4	E
TFYY54	Nano Physics	6	A1X	3	E
TMMS11	Models of Mechanics	6*	A1X	4	E
TNE083	Antenna Theory	6	A1X	2	E
TNE089	Electromagnetic Compatibility (EMC) and Printed Circuit Board (PCB) Design	6*	A1X	1	E
TNM086	Virtual Reality Techniques	6	A1X	2	E
TPPE61	Financial Optimization	6	A1X	2	E
TSBB11	Images and Graphics, Project Course CDIO	12*	A1X	4	E
TSBK03	Advanced Game Programming	6*	A1X	-	E
TSEA44	Computer Hardware - a System on Chip	6	A1F	1	E
TSEA84	Digital Design Project	6*	A1X	3	E
TSKS05	Communication Systems, Project Course	12*	A1X	4	E
TSRT08	Optimal Control	6	A1X	3	E
TSRT10	Automatic Control - Project Course	12*	A1X	4	E
TSTE17	System Design	12*	A1F	4	E
TSTE26	Powergrid and Technology for Renewable Production	6	A1X	3	E
TSTE85	Low Power Electronics	6	A1X	2	E



Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TATA62	Project - Applied Mathematics	12*	A1X	4	C/E
TSRT10	Automatic Control - Project Course	12*	A1X	4	C/E
TATA75	Theory of Relativity	6*	A1X	-	E
TATM38	Mathematical Models in Biology	6	A1X	3	E
TFYA18	Mathematical Methods of Physics	6	A1X	3	E
TFYA40	Analytical Mechanics	6	A1X	2	E
TMMS11	Models of Mechanics	6*	A1X	3	E
TPPE53	Financial Valuation Methodology	6	A1X	2	E
Period 2					
TATA62	Project - Applied Mathematics	12*	A1X	4	C/E
TSRT10	Automatic Control - Project Course	12*	A1X	4	C/E
TATA75	Theory of Relativity	6*	A1X	3	E
TFYA57	Relativistic Quantum Mechanics	6	A1X	2	E
TMMS11	Models of Mechanics	6*	A1X	4	E
TPPE61	Financial Optimization	6	A1X	2	E

Specialisation: Applied Mathematics

Specialisation: Biomedical Engineering

Course name	Credits	Level	Timetable module	ECV
Biomedical Engineering - Project Course	12*	A1X	4	С
Multivariate Statistical Methods	6	A1X	4	E
Mathematical Models in Biology	6	A1X	3	E
Biomedical Optics	6	A1X	1	E
Biomedical Engineering - Project Course	12*	A1X	4	С
Medical Image Analysis	6	A1X	1	E
	Biomedical Engineering - Project Course Multivariate Statistical Methods Mathematical Models in Biology Biomedical Optics Biomedical Engineering - Project Course	Biomedical Engineering - Project Course 12* Multivariate Statistical Methods 6 Mathematical Models in Biology 6 Biomedical Optics 6 Biomedical Engineering - Project Course 12*	Biomedical Engineering - Project Course 12* A1X Multivariate Statistical Methods 6 A1X Mathematical Models in Biology 6 A1X Biomedical Optics 6 A1X Biomedical Engineering - Project Course 12* A1X	Course nameCreditsLevelInnound moduleBiomedical Engineering - Project Course12*A1X4Multivariate Statistical Methods6A1X4Mathematical Models in Biology6A1X3Biomedical Optics6A1X1Biomedical Engineering - Project Course12*A1X4



Specialisation: Communication

Course code	Course name	Credits	Level	Timetable module	ECV	
Period 1						
TSIN01	Information Networks	6	A1X	3	С	
TSKS05	Communication Systems, Project Course	12*	A1X	4	С	
TSEK03	Radio Frequency Integrated Circuits	6	A1X	2	E	
TSIT03	Cryptology	6	A1X	2	E	
TSKS12	Modern Channel Coding, Inference and Learning	6	A1N	1	E	
Period 2						
TSKS05	Communication Systems, Project Course	12*	A1X	4	С	

Specialisation: Control and Information Systems

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TATA62	Project - Applied Mathematics	12*	A1X	4	C/E
TSRT10	Automatic Control - Project Course	12*	A1X	4	C/E
TDTS06	Computer Networks	6	G2X	1	E
Period 2					
TATA62	Project - Applied Mathematics	12*	A1X	4	C/E
TSRT10	Automatic Control - Project Course	12*	A1X	4	C/E
TSKS11	Networks: Models, Algorithms and Applications	6	G2X	3	E
TSRT08	Optimal Control	6	A1X	3	E



Specialisation: Electronics

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TSTE17	System Design	12*	A1F	4	C/E
TNE071	Microwave Engineering	6	A1X	1	E
TNE089	Electromagnetic Compatibility (EMC) and Printed Circuit Board (PCB) Design	6*	A1X	2	E
TSEA26	Design of Embedded DSP Processor	6	A1X	1	E
TSEA84	Digital Design Project	6*	A1X	3	E
TSEK03	Radio Frequency Integrated Circuits	6	A1X	2	E
TSEK11	Evaluation of an Integrated Circuit	2	A1X	4	E
TSTE25	Power Electronics	6	A1X	3	E
Period 2					
TSTE17	System Design	12*	A1F	4	C/E
TNE083	Antenna Theory	6	A1X	2	E
TNE089	Electromagnetic Compatibility (EMC) and Printed Circuit Board (PCB) Design	6*	A1X	1	E
TSEA44	Computer Hardware - a System on Chip	6	A1F	1	E
TSEA84	Digital Design Project	6*	A1X	3	E
TSTE26	Powergrid and Technology for Renewable Production	6	A1X	3	E
TSTE85	Low Power Electronics	6	A1X	2	E

Specialisation: Financial Mathematics

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TATA62	Project - Applied Mathematics	12*	A1X	4	С
TPPE53	Financial Valuation Methodology	6	A1X	2	С
Period 2					
TATA62	Project - Applied Mathematics	12*	A1X	4	С
TPPE61	Financial Optimization	6	A1X	2	С



Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TFYA50	Project course in Computational Physics CDIO	12*	A1X	4	C/E
TFYA92	Project Course in Applied Physics, CDIO	12*	A1X	4	C/E
TFYA17	Advanced Project Work in Applied Physics	6*	A1X	-	E
TFYA40	Analytical Mechanics	6	A1X	2	E
TFYA91	Quantum Structures: Photonics and Transport	6	A1X	1	E
Period 2					
TFYY54	Nano Physics	6	A1X	3	С
TFYA50	Project course in Computational Physics CDIO	12*	A1X	4	C/E
TFYA92	Project Course in Applied Physics, CDIO	12*	A1X	4	C/E
TFYA17	Advanced Project Work in Applied Physics	6*	A1X	-	E

Specialisation: Materials and Nano Physics

Specialisation: Mechatronics

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TSRT10	Automatic Control - Project Course	12*	A1X	4	С
TFYA40	Analytical Mechanics	6	A1X	2	E
Period 2					
TSRT10	Automatic Control - Project Course	12*	A1X	4	С
TSRT08	Optimal Control	6	A1X	3	E



Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TSBB11	Images and Graphics, Project Course CDIO	12*	A1X	4	С
TNM067	Scientific Visualization	6	A1X	3	E
TSBB17	Visual Object Recognition and Detection	6	A1X	2	E
TSBK03	Advanced Game Programming	6*	A1X	1	E
TSKS15	Detection and Estimation of Signals	6	A1X	2	E
Period 2					
TSBB11	Images and Graphics, Project Course CDIO	12*	A1X	4	С
TBMI02	Medical Image Analysis	6	A1X	1	E
TDDD56	Multicore and GPU Programming	6	A1X	2	E
TNM086	Virtual Reality Techniques	6	A1X	2	E
TSBK03	Advanced Game Programming	6*	A1X	-	E

Specialisation: Signal and Image Processing

Specialisation: System-on-Chip

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TSTE17	System Design	12*	A1F	4	C/E
TDTS08	Advanced Computer Architecture	6	A1X	2	E
TSEA26	Design of Embedded DSP Processor	6	A1X	1	E
TSEA84	Digital Design Project	6*	A1X	3	E
TSEK11	Evaluation of an Integrated Circuit	2	A1X	4	E
Period 2					
TSTE17	System Design	12*	A1F	4	C/E
TDDD56	Multicore and GPU Programming	6	A1X	2	E
TSEA44	Computer Hardware - a System on Chip	6	A1F	1	E
TSEA84	Digital Design Project	6*	A1X	3	E
TSIT02	Computer Security	6	G2F	2	E
TSTE85	Low Power Electronics	6	A1X	2	E



Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TFYA18	Mathematical Methods of Physics	6	A1X	3	С
TFYA40	Analytical Mechanics	6	A1X	2	С
TFYA50	Project course in Computational Physics CDIO	12*	A1X	4	С
TFYA17	Advanced Project Work in Applied Physics	6*	A1X	-	E
TFYA91	Quantum Structures: Photonics and Transport	6	A1X	1	E
Period 2					
TFYA50	Project course in Computational Physics CDIO	12*	A1X	4	С
TFYA17	Advanced Project Work in Applied Physics	6*	A1X	-	E
TFYA27	Elementary Particle Physics	6	A1X	2	E
TFYA28	Quantum Dynamics	6	A1X	1	E
TFYA57	Relativistic Quantum Mechanics	6	A1X	2	E
TFYY54	Nano Physics	6	A1X	3	E

Specialisation: Theory, Modelling and Visualization

Semester 10 (Spring 2019)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TQXX33	Degree project - Master's Thesis	30*	A1X	-	С
Period 2					
TQXX33	Degree project - Master's Thesis	30*	A1X	-	С

ECV = Elective / Compulsory /Voluntary *The course is divided into several semesters and/or periods

