

UUDET OPINTOJAKSOT/NEW COURSES				
Tunniste/Code	Opintojakson nimi/Name of the course	Op/ECTS	Vuosikurssi/Year	Periodi/Period
BK10A5400	Digitised Design and Production in Welded and 3D-printed Structures	5	M.Sc. (Tech.) 1	3-4
BK10A5500	Tekninen dokumentointi ja 3D-mallinnus	6	TkK1	1-3
BK10A5600	Johdatus etäopiskeluun	2	DI 1	1
BK50A4500	Advanced Metal Materials Processing	5	M.Sc. (Tech.) 2	1-2
BK60A1600	Advances in Robotics	3	M.Sc. (Tech.) 1-2	1-2
BK70A0600	Computational Methods in Mechanics	5	M.Sc. (Tech.) 2	3-4

MUUTTUVAT OPINTOJAKSOT/COURSES CHANGING				
Uusi opintojakso/New course			Korvaa opintojakson/Replaces the course	
Tunniste/Code	Opintojakson nimi/Name of the course	Op/ECTS	Tunniste, nimi ja op-määrä/Code, name, ECTS	
BK10A2801	Coating and Lamination of Fibre Based Packaging Materials	5	BK10A2800 Coating and Lamination of Fibre Based Packaging Materials JEDI 5 ECTS cr	
BK10A3301	Kuitutuotteiden työstötekniikka	6	BK10A3300 Kuitutuotteiden työstötekniikka JEDI 6 op	
BK10A3401	Green Fibre Materials	5	BK10A3400 Green Fibre Materials JEDI 5 ECTS cr	
BK10A4401	Teräsrakenteiden suunnittelu	5	BK10A4400 Teräsrakenteiden suunnittelu JEDI 5 ECTS cr	
BK10A4501	Renewable Packaging Materials	5	BK10A4500 Renewable Packaging Materials JEDI 5 ECTS cr	
BK10A4901	Package Design and Consumer - Package Interaction	5	BK10A4900 Package Design and Consumer - Package Interaction JEDI 5 ECTS cr	
BK10A5001	Modern Packaging Lines, Machinery and Package Manufacturing	5	BK10A5000 Modern Packaging Lines, Machinery and Package Manufacturing JEDI 5 ECTS cr	
BK10A5101	Functional Intelligent Packages	5	BK10A5100 Functional Intelligent Packages JEDI 5 ECTS cr	
BK10A5500	Tekninen dokumentointi ja 3D-mallinnus	6	BK50A3401 Tekninen dokumentointi ja 3D-mallinnus 6 op	
BK80A3201	Johdatus mekaniikkaan	3	BK80A3200 Mekaniikan perusteet 3 op	

POISTUVAT OPINTOJAKSOT/COURSES REMOVED				
Tunniste/Code	Opintojakson nimi/Name of the course	Op/ECTS	Korvaava opintojakso (jos päätetty)/Replaced by the course (if any)	
BK10A0300	Introduction to M.Sc. Studies	1	BH60A4600 Introduction to M.Sc. Studies 1 ECTS cr	
BK10A0600	Vertaistutorointi	3	BH10A0600 Vertaistutorointi 3 op	
BK10A1600	Johdatus JEDI-opiskeluun	2	BK10A5600 Johdatus etäopiskeluun 2 op	
BK10A1700	Tutkimusmetodiikka JEDI	4	BK10A1200 Research Methods and Methodologies 4 ECTS cr	
BK10A1801	Individual Project Work JEDI	7	BK10A1101 Laboratory Work Course in Mechanical Engineering 2-30 ECTS cr	
BK10A2001	Hitsaustekniikan jatkokurssi JEDI	5	BK20A2500 Sustainable Welding Production 5 ECTS cr	
BK10A2100	Hitsausmetallurgia JEDI	5	BK20A2400 Materials and Welding Metallurgy 5 ECTS cr	
BK10A2201	Laser Based Manufacturing for Design JEDI	5	BK30A1301 Laser Based Manufacturing for Design 5 ECTS cr	
BK10A2300	Laser Materials Processing JEDI	5	BK30A1201 Laser Materials Processing 5 ECTS cr	
BK10A2401	Digital Advanced Manufacturing with Lasers JEDI	5	BK30A0803 Digital Advanced Manufacturing with Lasers 5 ECTS cr	
BK10A2500	Additive Manufacturing - 3D Printing JEDI	5	BK30A0901 Additive Manufacturing - 3D Printing 5 ECTS cr	

BK10A2601	Tuotantotekniikan erityisopintopakso JEDI	5	BK50A4500 Advanced Metal Materials Processing 6 ECTS cr
BK10A2700	Lastuavan työstön prosessit JEDI	4	BK50A3800 Productivity and Sustainability of Metal Cutting 5 ECTS cr
BK10A2900	Konstruktio materiaalit ja niiden valinta JEDI	5	BK50A2701 Selection Criteria of Structural Material 5 ECTS cr
BK10A3000	Fluid Power JEDI	5	BK60A0800 Fluid Power 5 ECTS cr
BK10A3101	Simulation of a Mechatronic Machine JEDI	5	BK70A0001 Simulation of a Mechatronic Machine 5 ECTS cr
BK10A3201	Machine Dynamics JEDI	5	BK70A0501 Machine Dynamics 5 ECTS cr
BK10A4600	Control of Mechatronic Machines JEDI	5	BK60A1001 Control of Mechatronic Machines 5 ECTS cr
BK10A4700	Metalliset materiaalit JEDI	6	ei korvaavaa opintopaksoa
BK10A4800	Virtual Welding JEDI	6	BK20A2600 Modelling and Simulation in Welding 5 ECTS cr
BK10A5300	FE-analyysin sovellukset konetekniikassa JEDI	6	BK80A2800 FE-analyysin sovellukset konetekniikassa 5 op (huom. Tkk-tasoinen)

EI LUENNOIDA 2018-19/NOT LECTURED IN 2018-19		Luennoidaan seuraavan kerran/Next time lectured in	
Tunniste/Code	Opintopakson nimi/Name of the course		
BK50A4300	Managing Job Shops	2019-2020	

PERIODIMUUTOKSET/CHANGES TO TEACHING PERIODS			
Tunniste/Code	Opintopakson nimi/Name of the course	2017-18	2018-19
BK50A3500	Development of Sustainable Materials and Machinery for Packaging Technology	1	2
BK30A1301	Laser Based Manufacturing for Design	3-4	1-2
BK30A1400	Individual Project Work of Laser Technology	1-2 & 3-4	1-2
BK10A0500	Johdatus konetekniikan opiskeluun	1	1-2

#### Jatko-opintopaksumuutokset/Post-graduate course changes 2018-2019

UUDET OPINTOPAKSOT/NEW COURSES				
Tunniste/Code	Opintopakson nimi/Name of the course	Op/ECTS	Vuosikurssi/Year	Periodi/Period

MUUTTUVAT OPINTOPAKSOT/COURSES CHANGING			
Uusi opintopakso/New course		Korvaa opintopakso/Replaces the course	
Tunniste/Code	Opintopakson nimi/Name of the course	Op/ECTS	Tunniste, nimi ja op-määrä/Code, name, ECTS

POISTUVAT OPINTOPAKSOT/COURSES REMOVED			
Tunniste/Code	Opintopakson nimi/Name of the course	Op/ECTS	Korvaava opintopakso (jos päätetty)/Replaced by the course (if any)
BK50AJ110	Advanced Metal Materials Processing	6	BK50A4500 Advanced Metal Materials Processing 5 ECTS cr
BK70AJ120	Computational Mechanics	6	BK70A0600 Computational Methods in Mechanics 5 ECTS cr

EI LUENNOIDA 2018-19/NOT LECTURED IN 2018-19		Luennoidaan seuraavan kerran/Next time lectured in	
Tunniste/Code	Opintojakson nimi/Name of the course		
BK30AJ105	Postgraduate Course in Advanced Digital Photonic Manufacturing	2020-2021	
BK30AJ110	Postgraduate Course in Laser Based Additive Manufacturing and 3D Printing	2019-2020	

PERIODIMUUTOKSET/CHANGES TO TEACHING PERIODS			
Tunniste/Code	Opintojakson nimi/Name of the course	2017-18	2018-19
BK50AJ105	Design for Manufacturability and Assembly (DFM/DFMA)	1-2	1-4 (depending of the project)
BK60AJ130	Postgraduate Course in Modelling, Simulation and Control of Mechatronic Machine	1-2	3-4