

## Tampere University of Technology Pre-Approved Courses

**These courses may also be approved on an individual basis for use in Majors, Minors, or Certificates.**

<b>TUT Course</b>	<b>TUT Credits</b>	<b>MTU Equivalency</b>	<b>MTU Credits</b>
24230 Advanced CAD	3	MEEM Technical Elective	2
59250 Applied Limnology	3	BLU 8888 (Limnology) Biology Departmental Unassigned Elective	2
9701340 Art History in English	2	IS 3001 General Education Distribution: can be used in any list	2
292100 Basics of Business Information Management	4.5	BAU Business Departmental Unassigned Elective	3
2900020 Basics of Industrial Management	4.5	BAU Business Departmental Unassigned Elective	3
24501 Basics of Mechatronics	4.5	MEEM Technical Elective	3
59301 Biochemistry	3	BLU 8888 (Biochemistry) Biology Departmental Unassigned Elective	2
59335 Biodegradation & Bioremediation of Environmental Contaminants	4.5	BL 4040 Environmental Biochemistry	3
3104015 Biomechanics	4.5	MEEM 4180 Biomechanics	3
7101100 Biomedical Engineering	4.5	BE 3600 Biomedical Instrumentation (BE 3600 1 credit waived) * Student must take 1 additional credit of biomedical engineering of approved technical elective	3
2902010 Business Economics	3	BAU Business Departmental Unassigned Elective	2
25441 Combustion Technology	4.5	MEEM Technical Elective	3
25211 Computational Fluid Dynamics	6	MEEM Technical Elective	4
25321 Convective Heat Transfer	4.5	MEEM Technical Elective	3
5903003 Ecological Biochemistry	3	BLU 8888 Biology Departmental Unassigned Elective	2
2806001 Engineering Ceramics	4.5	MY Technical Elective	2
		MEEM Technical Elective	2
57995 Environmental Economics	3	EC 4600 Natural Resource and Environmental Economics EC 4600 1 credit waived	2
59340 Environmental Effects of Pollution	3	BLA Biological Sciences Departmental Unassigned Elective	2
9707010 Finnish for Beginners	3	IS 3001 General Education Distribution: can be used in any list	2
23610 General Finite Element Method	6	MEEM Technical Elective	4
5407000 Ground Waters	3	GE 4800 Groundwater Engineering ( 1 credit waived)	2
25513 Heating and Ventilating Engineering	4.5	MEEM Technical Elective	3
12503 History and Theory of Architecture	7.5	IS 3001 General Education Distribution: can be used in any list	5
7102200 Implantable Devices	4.5	BE 4660/ Tech Electives	3
3104000 Industrial Hygiene	4.5	BL 3060 Occupational Hygiene &	2
		BLU Biology Departmental Unassigned Elective	1
3400110 Introduction to Medical Biomaterials	3	BE 3500 Biomedical Materials (BE 3500 1 credit waived) * Student will have to take 1 additional credit of biomedical engineering technical	2

		elective	
7104003 Intro to Medical Informatics	6	BEU Biomedical Engineering Technical/Concentration Elective	4
23120 Introduction to Dynamics of Rigid Bodies	4.5	MEEM 2700 Dynamics	3
25400 Introduction to Energy Production	3	MEEM Technical Elective	2
23591 Introduction to Finite Element Method	4.5	MEEM 4405 Introduction to Finite Element Method	3
25300 Introduction to Heat Transfer	4.5	MEEM 3230 Heat Transfer	3
260100 Introduction to Hydraulics & Automation	4.5	MEEM Technical Elective	3
9901000 Introduction to Intercultural Communication	4.5	General Education Distribution: can be used in any list	3
2802041 Introduction to Laboratory Exercises in Materials Science	3	MEEM Free Elective	2
28501 Introduction to Plastics	1.5	MEEM Technical Elective	1
23100 Introduction to Statics of Rigid Bodies & 23110 Advanced Statics of Rigid Bodies	3 3	MEEM 2110 Statics & MEEM Departmental Unassigned Elective	3 1
7104100 Introduction to Telemedicine	3	BLU Biology Free Elective	2
25100 Introduction to Thermal Engineering & 25111 Engineering Thermodynamics	4.5 6	MEEM 2200 Thermodynamics & MEEMU MEEM Departmental Unassigned Elective	3 4
25100 Introduction to Thermal Engineering & 25200 Fluid Dynamics	4.5 4.5	MEEM 3210 Fluid Mechanics MEEMU MEEM Departmental Unassigned Elective	3 3
7102200 Implantable Devices	4.5	BE 4660 Active Implantable Devices	3
28111 Materials and Material Selection	4.5	MY 2100 Introduction to Materials Science and Engineering	3
24410 Mechanical Vibrations	6	MEEM 3700 Mechanical Vibrations & MEEMU MEEM Departmental Unassigned Elective	3 1
26140 Mobile Hydraulics	4.5	MEEM Technical Elective	3
2404240 Mobile Machinery	4.5	MEEM Technical Elective	3
25453 Modeling Furnaces	6	MEEM Technical Elective	4
9707020 More Finnish for Beginners	3	General Education Distribution: can be used in any list	2
24450 Noise Control	3	MEEM Technical Elective	2
3104000 Occupational Hygiene	4.5	BL 3060 Occupational Hygiene & BLU Biology Departmental Unassigned Elective	2 1
2508600 Optimization of Thermal Processes	4.5	MEEM Technical Elective	3
3500300 Organic Chemistry	4.5	CH 2400 Principles of Organic Chemistry (CH 2400 1 credit waived)	3
73131 Partial Differential Equations	4.5	MA 4515 Introduction to Partial Differential Equations	3
35152 Physical Chemistry I	3	CH 3510 Physical Chemistry I CH 3510 1 credit waived	2
28502 Plastics Engineering I	1.5	MEEM Technical Elective	1
28575 Polymer Composites	3	MY Technical Elective MEEM Technical Elective	2 2
28575 Polymer Composites & 2805820 Polymeric Materials (both classes must be taken to get CH/CM transfer credit)	6	CH/CM 4610 Introduction to Polymer Science & CMU/CMU Departmental Unassigned Elective	3 1
2805820 Polymeric Materials	3	MEEM Technical Elective	2
25850 Protection of the Atmosphere	3	MEEM Technical Elective	2
25460 Reactive Flows	7.5	MEEM Technical Elective	5
25601 Refrigeration Engineering I	4.5	MEEM Technical Elective	3
25602 Refrigeration Engineering II	4.5	MEEM Technical Elective	4
59400 Solid Waste Management	3	CEU Civil & Environmental Engineering Departmental Unassigned Elective	2
2808700 Special Treatise on Materials Science	7.5	MEEM Free Elective	5

23520 Strength of Materials II	4.5	MEEM Technical Elective	3
2503012 Thermal Conduction and Radiation	6	MEEM Technical Elective	3
25411 Thermal Power Plants I	4.5	MEEM Technical Elective	3
25420 Thermal Power Plants II	4.5	MEEM Technical Elective	3
2502150 Turbulence Phenomena in Fluid Dynamics	6	MEEM Technical Elective	4
25210 Viscous Fluid Flow	4.5	MEEM Technical Elective	3

Please visit the TUT web site at [www.tut.fi](http://www.tut.fi) - in English – Studies - for course availability and descriptions.