



Kütahya Dumlupınar Üniversitesi

Simav Technology Faculty

Industrial Design Engineering

Endüstriyel Tasarım Mühendisliği

1.Semester Course Plan				
Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
221811001	Turkish Language I	2+0+0	Compulsory	2
221811002	Atatürk's Principles and History of Turkish Revolution I	2+0+0	Compulsory	2
221811003	Mathematics I	4+0+0	Compulsory	5
221811004	Occupational Health and Safety I	2+0+0	Compulsory	3
221811005	Physics I	3+0+0	Compulsory	4
221811006	Chemical	3+0+0	Compulsory	4
221811007	Technical Drawing I	2+2+0	Compulsory	5
221811008	Introduction to Industrial Design Engineering	2+0+0	Compulsory	3
YDG1	Foreign Language Elective Course Group I	2+0+0	Elective	2
221811020	English I	2+0+0	Elective	2
221811021	German I	2+0+0	Elective	2
Total ECTS				30

2.Semester Course Plan				
Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
KP2218101	Career Planning	2+0+0	Compulsory	2
221812001	Turkish Language II	2+0+0	Compulsory	2
221812002	Atatürk's Principles and History of Turkish Revolution II	2+0+0	Compulsory	2
221812003	Mathematics II	4+0+0	Compulsory	5
221812004	Occupational Health and Safety II	2+0+0	Compulsory	3
221812005	Physics II	3+0+0	Compulsory	4
221812007	Technical Drawing II	2+2+0	Compulsory	5
221812008	Basic Computer Technologies	3+2+0	Compulsory	7
YDG2	Foreign Language Elective Course Group II	2+0+0	Elective	2
221812020	English II	2+0+0	Elective	2
221812021	German II	2+0+0	Elective	2
Total ECTS				32

3.Semester Course Plan				
Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
221813001	Materials Information	3+0+0	Compulsory	3
221813002	Computer-Aided Design I	2+2+0	Compulsory	4
221813003	Differential Equations	4+0+0	Compulsory	4
221813004	Production Methods	2+2+0	Compulsory	4
221813005	Statistics	3+0+0	Compulsory	3
221813006	Technical English I	3+0+0	Compulsory	3
SSG1	Social Elective Course Group I	2+0+0	Elective	3
221813020	Work Study and Planning	2+0+0	Elective	3
221813021	Labor Relations and Ethics	2+0+0	Elective	3
221813022	Management and Organization	2+0+0	Elective	3
TSG1	Technical Elective Course Group I	3+0+0	Elective	3
221813040	Engineering Mechanics	3+0+0	Elective	3
221813041	Renewable Energy Resources	3+0+0	Elective	3
221813042	Modern Welding Methods and Design	3+0+0	Elective	3
TSG2	Technical Elective Course Group II	2+0+0	Elective	3
221813060	Engineering Ergonomics	2+0+0	Elective	3
221813061	Perspective	2+0+0	Elective	3
221813062	Steel Structure Design	2+0+0	Elective	3
Total ECTS				30

4.Semester Course Plan				
Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
221814001	Engineering Materials	3+0+0	Compulsory	3
221814002	Computer-Aided Design II	2+2+0	Compulsory	4
221814003	Strength	3+0+0	Compulsory	4
221814004	Engineering Mathematics	3+0+0	Compulsory	4
221814005	Model and Prototype Development I	2+2+0	Compulsory	3
221814006	Design Culture	2+0+0	Compulsory	2
TSG3	Technical Elective Course Group III	3+0+0	Elective	4

221814020	Reverse Engineering	3+0+0	Elective	4
221814021	Industrial Automation	3+0+0	Elective	4
221814022	Industrial Production Planning and Control	3+0+0	Elective	4
TSG4	Technical Elective Course Group IV	3+0+0	Elective	3
221814040	Quality Management and Standardization	3+0+0	Elective	3
221814041	Wood Materials in Industrial Production	3+0+0	Elective	3
221814042	Material Characterization	3+0+0	Elective	3
TSG5	Technical Elective Course Group V	2+0+0	Elective	3
221814060	Design Geometry	2+0+0	Elective	3
221814061	Basic Design	2+0+0	Elective	3
221814062	Technical English II	2+0+0	Elective	3

Total ECTS 30

5.Semester Course Plan

Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
221815001	Industrial Measurement and Control	2+0+0	Compulsory	2
221815002	Thermodynamics	2+0+0	Compulsory	3
221815003	Product Development in Basic Design I	2+2+0	Compulsory	4
221815004	Machine Elements I	2+0+0	Compulsory	3
221815005	Model and Prototype Development II	2+2+0	Compulsory	3
221815006	Engineering Economics	3+0+0	Compulsory	3
TSG6	Technical Elective Course Group VI	2+2+0	Elective	4
221815020	Sheet Metal Mold Design	2+2+0	Elective	4
221815021	Material Selection in Design	2+2+0	Elective	4
221815022	Furniture Design	2+2+0	Elective	4
TSG7	Technical Elective Course Group VII	2+2+0	Elective	4
221815040	Computer-Aided Engineering	2+2+0	Elective	4
221815041	Energy Systems Design	2+2+0	Elective	4
221815042	Plastic Materials Technology	2+2+0	Elective	4
TSG8	Technical Elective Course Group VIII	3+0+0	Elective	4
221815060	Work Moulds Design	3+0+0	Elective	4
221815061	Heat Transfer	3+0+0	Elective	4
221815062	Mechatronic System Design	3+0+0	Elective	4

Total ECTS 30

6.Semester Course Plan

Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
221816001	Fluid Mechanics	2+0+0	Compulsory	3
221816002	Computer-Aided Manufacturing I	2+2+0	Compulsory	4
221816003	Product Development in Basic Design II	2+2+0	Compulsory	4
221816004	Machine Elements II	2+0+0	Compulsory	3
TSG10	Technical Elective Course Group X	2+2+0	Elective	4
221816040	Engineering Design Tools and Elements	2+2+0	Elective	4
221816041	Hydraulic-Pneumatic	2+2+0	Elective	4
221816042	Medical Device Design	2+2+0	Elective	4
TSG11	Technical Elective Course Group XI	3+0+0	Elective	4
221816060	User-Centered Design	3+0+0	Elective	4
221816061	Material Inspection Methods	3+0+0	Elective	4
221816062	Wood Joining Techniques	3+0+0	Elective	4
TSG12	Technical Elective Course Group XII	2+2+0	Elective	4
221816080	Web Design	2+2+0	Elective	4
221816081	Wooden Product Design	2+2+0	Elective	4
221816082	Animation Applications in Design	2+2+0	Elective	4
TSG9	Technical Elective Course Group IX	3+0+0	Elective	4
221816020	Numerical Analysis	3+0+0	Elective	4
221816021	Linear Algebra	3+0+0	Elective	4
221816022	Recycling Systems Design	3+0+0	Elective	4

Total ECTS 30

7.Semester Course Plan

Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
221817001	Graduation Project	0+2+0	Compulsory	6
221817002	Computer-Aided Manufacturing II	2+2+0	Compulsory	4
221817003	Product Development in Basic Design III	2+2+0	Compulsory	4
221817004	Entrepreneurship and Project Management	3+0+0	Compulsory	4
SSG2	Social Elective Course Group II	2+0+0	Elective	3
221817080	Patent and Property Rights	2+0+0	Elective	3
221817081	History of Science and Technology	2+0+0	Elective	3
221817082	Marketing	2+0+0	Elective	3

TSG13	Technical Elective Course Group XIII	3+0+0	Elective	3
221817020	Mechanism Technique	3+0+0	Elective	3
221817021	Design and Production of Advanced Engineering Materials	3+0+0	Elective	3
221817022	Optimization Techniques	3+0+0	Elective	3
TSG14	Technical Elective Course Group XIV	3+0+0	Elective	3
221817040	Design for Manufacturing	3+0+0	Elective	3
221817041	Additive Manufacturing Design	3+0+0	Elective	3
221817042	Cost Analysis in Design	3+0+0	Elective	3
TSG15	Technical Elective Course Group XV	3+0+0	Elective	3
221817060	Design for the Disabled	3+0+0	Elective	3
221817061	Energy Efficiency Strategy and Action Plan	3+0+0	Elective	3
221817062	Artificial Intelligence Applications in Design	3+0+0	Elective	3
			Total ECTS	30

8.Semester Course Plan

Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
221818001	Vocational Education in Business	5+35+0	Compulsory	30
			Total ECTS	30