

PRE/COREQUISITES FOR MECHANICAL & MANUFACTURING ENGINEERING PROGRAM

	Course	Pre and Co-requisites
Freshman all Semester	ENGL 1010 – Freshman English I	Pre-requisite: None
	MATH 1910 - Calculus I	Pre-requisite: MATH 1720 or 1730, or permission of Department Chair
	CHEM 1110 - General Chemistry I	Pre-requisite: High School Chemistry OR CHEM 1000/1001 and 2 years of high school algebra
	CHEM 1111 - General Chemistry Lab I	Co-requisite: CHEM 1110
	ENGR 1020 - Freshman Engr. Seminar	Pre-requisite: None
	ENGR 1151 - Computer Engr. Graphics	Pre-requisite: None
	UNIV 1000 - University Orientation	Pre-requisite: None
Spring Semester	ENGL 1020 - Freshman English II	Pre-requisite: Grade of "C" or better in ENGL 1010
	MATH 1920 - Calculus II	Pre-requisite: Grade of "C" or better in MATH 1910
	PHYS 2110 - General Physics I	Pre-requisite: Grade of "C" or better in MATH 1910; Co-requisite: MATH 1920
	PHYS 2111 - General Physics Lab I	Co-requisite: PHYS 2110
	ENGR 2230 - Engineering Programming, or ENGR 2240 – MATLAB Based Programming for Engineers	Pre-requisite: Grade of "C" or better in ENGR 1020 and MATH 1910
	COMM 2200-Public Speaking	Pre-requisite: None
Fall Semester	MATH 2110 - Calculus III	Pre-requisite: Grade of "C" or better in MATH 1920
	HIST 2010 - American History I	Pre-requisite: Grade of "C" or better in ENGL 1020
	ENGR 2110 - Statics	Pre-requisite: Grade of "C" or better in PHYS 2110
	ENGR 2010 - Thermodynamics	Pre-requisite: Grade of "C" or better in PHYS 2110
	PHYS 2120 - General Physics II	Pre-requisite: PHYS 2110
	PHYS 2121 - General Physics Lab II	Co-requisite: PHYS 2120
Sophomore Spring Semester	MATH 3120 - Applied Mathematics (Ordinary Differential Equation on the Banner)	Pre-requisite: Grade of "C" or better in MATH 1920
	ENGR 2000 - Circuits I	Pre-requisite: Grade of "C" or better in ENGR 2230 (or ENGR 2240), MATH 2110 and PHYS 2120; Corequisite: MATH 3120
	ENGR 2001 - Circuits Lab I	Co-requisite: ENGR 2000
	Humanities Elective	Please check current TSU Undergraduate Catalog
	ENGR 2120 - Dynamics	Pre-requisite: Grade of "C" or better in ENGR 2110
	Humanities Elective English	Pre-requisite: Grade of "C" or better in ENGL 1020

PRE/COREQUISITES FOR MECHANICAL & MANUFACTURING ENGINEERING PROGRAM (Contd.)

	Course	Pre and Co-requisites
Junior Fall Semester	ENGR 3200 - Introduction to Design	Pre-requisite: Grade of "C" or better in ENGR 2010, ENGR 2120
	ENGR 3300 - Materials Science	Pre-requisite: Grade of "C" or better in CHEM 1110 and PHYS 2120
	ENGR 3400 - Numerical Analysis	Pre-requisite: Grade of "C" or better in ENGR 2230 (or ENGR 2240) and MATH 3120
	MEEN 3210 - Mechanism Design	Pre-requisite: Grade of "C" or better in ENGR 2120
	MEEN 3511 - Measurements Lab	Pre-requisite: ENGR 2230 (or ENGR 2240), Co-requisite: ENGR 3200
	ENGR 2130 - Mechanics of Materials	Pre-requisite: Grade of "C" or better in ENGR 2110
	ENGR 2131 - Mechanics of Materials Lab	Co-requisite: ENGR 2130
Junior Spring Semester	Mathematics/Science	Please check current TSU Undergraduate Catalog
	MEEN 3100 - Materials Processing	Pre-requisite: Grade of "C" or better in ENGR 3300; Co-requisite: MEEN 3521
	MEEN 3220 - Design of Machine Elements	Pre-requisite: Grade of "C" or better in ENGR 2130 and MEEN 3210
	MEEN 3250 - Computer Aided Design	Pre-requisite: Grade of "C" or better in ENGR 3200
	MEEN 3521- Materials Processing Lab	Pre-requisite: Grade of "C" or better in MEEN 3511, ENGR 3300; Co-requisite: MEEN 3100
	CVEN 3100 - Fluid Mechanics	Pre-requisite: Grade of "C" or better in ENGR 2110
	Technical Elective	Please check current TSU Undergraduate Catalog
Senior Fall Semester	HIST 2020 - American History II	Pre-requisite: Grade of "C" or better in ENGL 1020
	MEEN 4011 - Mechatronics Lab	Pre-requisite: Grade of "C" or better in ENGR 2000, ENGR 2001, MEEN 3511
	MEEN 4150 - Heat Transfer	Pre-requisite: Grade of "C" or better in ENGR 2010, CVEN 3100 and ENGR 3400
	MEEN 4230 - Machine Design	Pre-requisite: Grade of "C" or better in MEEN 3220 and MEEN 3250
	ENGR 4201 - FE Review Lab	Pre-requisite: senior standing
	ENGR 4500 - Capstone Design I	Pre-requisite: Grade of "C" or better in ENGR 3200, MEEN 3220, MEEN 3250, Co-requisite: MEEN 4150
	ENGR 4900 - Professional Development	Pre-requisite: senior standing
Social Science Elective	Please check current TSU Undergraduate Catalog	
Senior Spring Semester	MEEN 4021 - Thermal/Fluid Systems Lab	Pre-requisite: Grade of "C" or better in MEEN 4150
	MEEN 4250 - Design of Thermal Systems	Pre-requisite: Grade of "C" or better in MEEN 4150
	ENGR4510- Capstone Design II	Pre-requisite: Grade of "C" or better in ENGR 4500
	Design Elective	Please check current TSU Undergraduate Catalog
	Humanities Elective	Please check current TSU Undergraduate Catalog
	Social Science Elective	Please check current TSU Undergraduate Catalog