



TRANSFER ADVISING SHEET



School of Engineering & Applied Sciences

Mechanical Engineering BS

Montgomery College Associate of Science Degree in General Engineering

Catalog Year 2013-14

MC Code: 410

Purpose: The curriculum is designed to permit the student to transfer into a baccalaureate degree program in Mechanical Engineering. **The Mechanical Engineering program at UDC is accredited by the Engineering Accreditation Commission of ABET, Inc.**

	Montgomery Courses to A.S. in General Engineering	Credits	UDC Requirements to B.S. in Mechanical Engineering		Credits
ES 100	Intro to Engineering Design	3	MECH-105/ CCNE-101 Intro to Eng.	Computer Aided Graphics	5
CH 101	Principles of Chemistry I or a Natural Science Lab Distribution	4	CHEM-111/113	General Chemistry I Lec/Lab	4
MA 181	Calculus I	4	MATH 151 & 155	Calculus I (Lec/Lab)	4
MA 182	Calculus II	4	MATH 152 & 156	Calculus II (Lec/Lab)	4
MA 280	Multivariable Calculus	4	MATH 253	Calculus III	4
MA 282	Differential Equations	3	MATH 254	Differential Equations	3
PH 161	General Physics I	3	PHYS-201/205	Univ. Physics I (Lec/Lab)	4
PH 262	General Physics II	4	PHYS-202/206	Univ. Physics II (Lec/Lab)	4
ES 102	Statics	3	CVEN-201	Engineering Mechanics I	3
ES 221	Dynamics	3	CVEN-202	Engineering Mechanics II	3
ES 220	Mechanics of Materials	3	CVEN-206	Solid Mechanics (Lec)	3
ES 232	Thermodynamics	3	MECH 208	Thermodynamics	3
ES 240	Scientific & Engineering Computation	3	CVEN-308	Applied Numerical Anay	3
EN 102	Techniques of Reading and Writing II	3	IGED -XXX	General Education	3
EN 101	(If needed for EN102) Techniques of Reading and Writing I	3			
	Arts distribution	3	IGED -XXX	General Education	3
	Humanities distribution	3	IGED -XXX	General Education	3
	Behavioral & Social Science Dist.	3	IGED -XXX	General Education	3
	Behavioral & Social Science Dist.	3	IGED -XXX	General Education	3
	Health foundation	1	N/A		
TOTAL MC credits		64	Total equivalent UDC credits		62

Additional UDC Courses for BS Mechanical Engineering					
IGED-270 or IGED-140*	Discov. Loc/Glob Cul Diversity Foundations Ethics and Values	3	MECH-222	Analysis & Synthesis of Mechanisms	3
IGED-280*	Discov. Civ/Ser/Team	3	MECH-351	Heat Transfer	3
CVEN -105	Computer Aided Graphics	3	MECH-361	Machine Design	3
MECH-205	Materials Science	3	MECH-371	Design of Control System Lec	3
CVEN-207	Solid Mechanics Lab	1	MECH-373	Design of Control System Lab	1
ELEG-221	Electric Circuit I Lec	3	MECH-406	Engineering Economics	3
ELEG-223	Electric Circuit I Lab	1	MECH-xxx	ME Technical Elective I	3
MATH-381	Probability & Statistics	3	MECH-xxx	ME Technical Elective II	3
MECH-321	Fluid Mechanics Lec	3	MECH-xxx	ME Technical Elective III	3
MECH-322	Thermo/Fluid Lab	1	MECH-491	Senior Design Project I	3
MECH-222	Engineering Measurement Lec	3	MECH-492	Senior Design Project II	3
MECH-223	Engineering Measurement Lab	1	MECH-462	Design of Energy Systems	3
MECH -381	Microcontroller in ME	3	CVEN-481	FE Preparation	1
TOTAL Additional credits					66

*All students are required to take two general education requirement courses (among IGED-140, IGED-270, and IGED-280). If the student took a Philosophy course (other than logic) or Ethics course, IGED-270 and IGED-280 need to be taken. Otherwise, the student needs to take IGED-140 and IGED-280.

Total credit hours required to graduate in B.S. Mechanical Engineering from UDC is 128 Credit Hours