



ENGINEERING

Associate in Science (AS)

Advising Sheet – Suggested Course Sequence

Student Name _____

Faculty Advisor _____

REQUIRED COURSES	CR.	PRE-REQUISITE COURSES	APPROVED COURSE SUBSTITUTIONS	TERM THAT I PLAN TO TAKE OR √ TAKEN
SDV 100 College Success Skills	1			
ENG 111 College Composition I	3			
MTH 173 Calculus with Analytical Geometry I	5	MTH 164 or MTH 166		
CHM 111 College Chemistry I	4	Math Mod. 1-9		
EGR 120 Introduction to Engineering	2	See Note 1		
MTH 174 Calculus with Analytical Geometry II	5	MTH 173		
EGR 124 Intro to Engineering & Engineering Methods (or) CHM 112 College Chemistry II	3-4	EGR 120	Electrical/Computer Engineering students must take EGR 124	
EGR 126 Computer Programming for Engineers	3			
PHY 241 General University Physics I	4			
MTH 279 Ordinary Differential Equations	4	MTH 174		
Track Courses	12		See co- and pre-requisites for each track course in Notes 6, 7, 8, & 9	
ENG 112 College Composition II	3	ENG 111		
PHY 242 General University Physics II	4			
MTH 277 Vector Calculus	4	MTH 174		
HLT/PED Health or Physical Education	1			
Social/Behavioral Science Electives	6		See Note 2	
Humanities Electives	6		See Note 3	
Total Credits For Program	70-71			

NOTES:

- MTH 163 is co-requisite for EGR 120.
- The social/behavioral sciences elective requirement can be satisfied by courses with the following prefixes: ECO, GEO, PLS, HIS, PSY (except PSY 100), and SOC.
- The humanities elective requirement must be satisfied by completing one 3-credit conceptual humanities course that offers breadth of knowledge. Additional humanities electives may be conceptual or applied with a focus on skills, techniques and procedures. See website (<http://www.jtcc.edu/humanitieselectives>) for a list of approved conceptual and applied humanities electives.
- Students are encouraged to consult their faculty advisors or transfer colleges for advice regarding the selection of electives and other requirements specific to the engineering programs at the institutions where they plan to transfer.
- Transfer Articulation Agreement with the School of Engineering and Applied Sciences at the University of Virginia.* Graduates of this program with 3.4 GPAs will meet the transfer requirements to U.Va. and may pursue their bachelor degrees in engineering by attending classes in Charlottesville. JTCC graduates with GPAs of less than 3.5 may seek admission to the U.Va. portion of the program in the same manner as all other students wishing to enter U.Va. degree programs.
- Pre-requisite for EGR 270 is EGR 126. Pre-requisite and co-requisite course information for the Electrical or Computer Engineering focus: EGR 251 and EGR 255 must be taken together; pre-requisites for EGR 251-255 are MTH 173 and EGR 124, co-requisite course is PHY 242. EGR 252 and EGR 2** must be taken together; pre-requisites for EGR 252-2** are EGR 251 & EGR 255. Pre-requisites for EGR 261 are EGR 251, EGR 126 and MTH 279.
- EGR 120 is a prerequisite for EGR 140. MTH 173 is a co-requisite for EGR 140
- EGR 140 is a prerequisite for EGR 246. MTH 174 is a co-requisite for EGR 246.
- EGR 140, MTH 174, and PHY 241 are prerequisites for EGR 245.
- EGR 252+Lab and EGR 261+Lab are all recommended for seamless transfer into third year status.
- Track Courses in recommended order: (EGR 248 can be taken out of order.)

For more information on this major, contact the Division of Engineering, Business and Public Services. 804.706.5121 (Chester Campus, Godwin Hall, G108) or 804.594.1480 (Midlothian Campus, Hamel Hall, H206).

GENERAL ENGINEERING				ELECTRICAL/COMPUTER ENGINEERING			
Course		Cr.	PRE-REQ	Course	Cr.	PRE-REQ	
EGR 140	Engineering Mechanics – Statics	3	Note 7	EGR 270	Fundamentals of Computer Engineering	4	
EGR 246	Mechanics of Materials	3	Note 8	EGR 251	Basic Electric Circuits I	3	Note 6
EGR 245	Engineering Mechanics-Dynamics	3	Note 9	EGR 255	Electric Circuits Laboratory	1	
EGR 248	Thermodynamics for Engineers	3		AND either		4	
				EGR 261	Signals and Systems + EGR 2** - Signals and Systems Laboratory		Note 6
				OR		4	
				EGR 252	Basic Electric Circuits II + EGR 2** - Electric Circuits Laboratory II		

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