

BSE-HAVELOCK Mechanical Engineering Systems BSE

PART-TIME COURSE SEQUENCE FOR MATH/SCIENCE/ENGR COURSES

Updated 3/2014

Year	Term	NCSU Class	CCC Class	Description	Credit Hours	Prerequisites	Corequisites
1	F	E101	EGR 150	Intro To Engr	1		
		MA 141	MAT 271	Calculus I	4		
	Sp	MA 241	MAT 272	Calculus II	4	Calc-I	
		PY 205	PHY 251	Physics I	4	Calc-I	Calc-II
	Su	CSC 112	CSC 136	FORTRAN or C++	3		
2	F	MA 242	MAT 273	Calculus III	4	Calc-II	
		PY 208	PHY 252	Physics II	4	Calc-II, Phy 251	
	Sp	NA	MAT 280	Linear Algebra	3	Calc-I	
		MA 341	MAT 285	Differential Equations	3	Calc-II	
		CH 101 & 102	CHM 151	General Chemistry I	4		
SU	GC 120	DFT 170	Foundations of Graphics	3	E115		
3	F	MSE 201		Materials	3	Chem-I	
		MAE 206		Statics	3	Phy-I, Calc-II	
	Sp	MAE 314		Solids	3	Calc-III, Statics-C	Materials
		MAE 208		Dynamics	3	Calc-III, Statics-C	
	SU	MES 305		ME Lab I	1	MSE 201, MAE 206	
4	F	MAE 301		Engineering Thermodynamics I	3	Calc-III, Phy-II	
		MAE 308		Fluid Mechanics	3	Calc-III, Dynamics-C	Dif Eq, MAE 301
	Sp	ECE 331		Princ Of Elec Engr I	3	Calc-II, Physics II	
		MAE 316		Strength Of Mechanical Components	3	MAE 314-C	Dif Eq.
	Su						
5	F	MAE 315		Dynamics of Machines	3	Dynamics-C	Dif. Eq
		MES 300		Systems Engineering	4	MAE 206	ST 370
	Sp	ENG 331		Comm For Engr & Tech	3		
		ST 370		Prob & Stat. for Engrs	3	Calc-I	
		MAE 435		Principles of Auto. Control	3	Dif Eq, MAE 315	MAE 308
6	F	MAE 415		Analysis for Mechanical Engr Design	3	MAE 315, MAE 316	
		MAE 310		Heat Transfer Fundamentals	3	Dif Eq, MAE 301-C	MAE 308
		MES 401		Capstone Design I	3	MES 300, MAE 316	MAE 310, MAE 415
	Sp	MAE 412		Design of Thermal System	3	MAE 302, MAE 308, MAE 310	
		MES 405		MES Lab II	2	MES 305, MAE 314, MAE 308	MAE 435, MAE 310
	MES 402		Capstone Design II	4	MES 401		