

UNIVERSITY OF NORTH ALABAMA / UNIVERSITY OF ALABAMA

Effective Fall 2014

Physics / Mechanical Engineering

Dual Degree Engineering Program

		<i>First Semester</i>			<i>Second Semester</i>		
			Grade			Grade	
UNA – Year 1	EN 111 or EN 121	3 hrs.		EN 112 or EN 122	3 hrs.		
	1 st History Course	3 hrs.		2 nd History Course	3 hrs.		
	MA 125 Calculus I	4 hrs.		MA 126 Calculus II	4 hrs.		
	PH 251 Technical Physics I	5 hrs.		PH 252 Technical Physics II	5 hrs.		
	TOTAL	15 hrs.		TOTAL	15 hrs.		
UNA – Year 2	COM 201 Speech	3 hrs.		1 st Social & Behav. Sci. Elec	3 hrs.		
	AEM 201 Statics (UA dist.ed.)	3 hrs.		AEM 264 Dynamics (UA dist. ed.)	3 hrs.		
	MA 227 Calculus III	4 hrs.		MA 355 Differential Eqns	3 hrs.		
	PH 343 Modern Physics	4 hrs.		PH 356W Intermediate Lab.	4 hrs.		
	PH 471 Classical Dynamics	3 hrs.		PH 444 Quantum Mechanics	3 hrs.		
	TOTAL	17 hrs.		TOTAL	16 hrs.		
UNA – Year 3	AEM 311 Fluid Mech (UA dist. ed.)	3 hrs.		2 nd Social & Behav. Sci. Elec	3 hrs.		
	CS 135 Computer Skills	3 hrs.		ME 215 Thermo I (UA dist. ed.)	3 hrs.		
	CH 111 Chemistry	4 hrs.		CS 155 Computer Sci I	3 hrs.		
	PH 447 Electricity & Magnetism	3 hrs.		PH 448 Electromag.Fields	3 hrs.		
	PH 495 Directed Research**	2 hrs.		PH 495 Directed Research**	2 hrs.		
	TOTAL	15 hrs.		TOTAL	15 hrs.		
UA – Year 1	ME 305 Thermo II	3 hrs.		1 st Literature Course	3 hrs.		
	MTE 271 Materials	3 hrs.		ME 383 Manufacturing	3 hrs.		
	AEM 250 Mech. Of Materials	3 hrs.		ME 350 Static Mech. Comp.	4 hrs.		
	AEM 251 M of M Lab	1 hrs.		ME 309 Heat Transfer	3 hrs.		
	ME 349 Engineering Analysis	3 hrs.		ECE 320 Fund. Elec. Eng.	3 hrs.		
	ENGR 161 Eng. Graphics	1 hrs.					
	TOTAL	14 hrs.		TOTAL	16 hrs.		
UA – Year 2	ME 360 Control Instrumentation	3 hrs.		2 nd Literature Course	3 hrs.		
	ME 372 Dynamics Systems	3 hrs.		Fine Arts/Humanities Elective	3 hrs.		
	ME elective (from list)	3 hrs.		ME 460 Thermal Instrum.	4 hrs.		
	ME 489 Design I	3 hrs.		ME 490 Design II	3 hrs.		
	ME 450 Dynamic Mach. Comp.	3 hrs.		ME elective (from list)	3 hrs.		
	TOTAL	15 hrs.		TOTAL	16 hrs.		

**One of the two PH 495 Directed Research courses may be replaced with a PH 48X Topics in Physics course.

NOTE: All students participating in this program of study must be a declared physics major and be advised by the designated UNA Physics DDEP advisor while enrolled at UNA.