

# UNIVERSITY OF NORTH ALABAMA – UNIVERSITY OF ALABAMA

Effective Fall 2014

## Computer Science / Aerospace Engineering

### Dual Degree Engineering Program

		<i>First Semester</i>			<i>Second Semester</i>		
			UA EQUIV	Sem/ year		UA EQUIV	Sem/ year
<b>UNA – Year 1</b>	<i>EN 111 or EN 121</i>	3 hrs.	EN 101		<i>EN 112 or EN 122</i>	3 hrs.	EN102
	<i>CH 111 &amp; CH 111L</i>	4 hrs.	CH 101		<i>CH 112 &amp; CH 112L</i>	4 hrs.	
	<i>MA 125 Calculus I</i>	4 hrs.	MATH 125		<i>MA 126 Calculus II</i>	4 hrs.	MATH 126
	<i>CS 245 Discrete</i>	3 hrs.			<i>COM 201 Speech</i>	3 hrs.	COM 123
	<i>CS 155 Computer Science I</i>	3 hrs.	AEM 249		<i>CS 255 Computer Science II</i>	3 hrs.	
	<b>TOTAL</b>	<b>17 hrs.</b>			<b>TOTAL</b>	<b>17 hrs.</b>	
<b>UNA – Year 2</b>	<i>EC 252 Micro Econ</i>	3 hrs.	EC 110		<i>MA 355 Diff Eq</i>	3 hrs.	MATH 238
	<i>PH 251 Technical Physics I</i>	5 hrs.	PH 105		<i>PH 252 Technical Physics II</i>	5 hrs.	PH 106
	<i>MA 227 Calculus III</i>	4 hrs.	MATH 227		<i>GE 102 World Geography</i>	3 hrs.	ENGR 103?
	<i>CS 355 Alg &amp; Data Structures</i>	3 hrs.			<i>CS 310 Comp Org/Assembly</i>	3 hrs.	
	<i>CS 410W Prog Languages</i>	3 hrs.			<i>1<sup>st</sup> CS Advanced Elective</i>	3 hrs.	
	<b>TOTAL</b>	<b>18 hrs.</b>			<b>TOTAL</b>	<b>17 hrs.</b>	
<b>UNA – Year 3</b>	<i>CS 311 Comp Architecture</i>	3 hrs.			<i>CS 455 Software Eng</i>	3 hrs.	
	<i>CS 420 Operating Systems</i>	3 hrs.			<i>2<sup>nd</sup> CS Advanced Elective</i>	3 hrs.	
	<i>CS Prog. Lang Elective</i>	3 hrs.			<i>3<sup>rd</sup> CS Advanced Elective</i>	3 hrs.	
	<i>AEM 201 Dynamics (online-UA)</i>	3 hrs.			<i>UNA CS general elective</i>	3 hrs.	
	<i>MA 345 Applied Stats</i>	3 hrs.	GY 105?		<i>MA 237 Linear Algebra</i>	3 hrs.	MATH 237
	<b>TOTAL</b>	<b>15 hrs.</b>			<b>TOTAL</b>	<b>15 hrs.</b>	

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

<b>UA – Year 1 Summer A</b>	AEM 264 Dynamics	3 hrs.						
<b>UA – Year 1 Summer B</b>	AEM 311 Fluid Mechanics	3 hrs.						
	AEM 250 Mech. Materials	3 hrs.						
	AME 251 Mech. Materials Lab	1 hr.						
	<b>TOTAL</b>	<b>10 hrs.</b>						
<b>UA – Year 1</b>			UNA EQUI V				UNA EQUI V	
	AEM 313 Aerodynamics I	3 hrs.			AEM 368 Flight Dynamics II	4 hrs.		
	AEM 341 Aircraft Structures	3 hrs.			AEM 413 Aerodynamics II	3 hrs.		
	AEM 349 Engr. Analysis	4 hrs.			AEM 360 Astronautics	3 hrs.		
	ME 215 Thermodynamics	3 hrs.			EN 205 Literature I	3 hrs.	EN 211	
	HY 101 History: Western Civ. to 1648	3 hrs.	HI 101		HY102 History: Western Civ. since 1648	3 hrs.	HI 102	
					ENGR 161 Engr. Graphics	1 hr.		
	<b>TOTAL</b>	<b>16 hrs.</b>			<b>TOTAL</b>	<b>16 hrs.</b>		
<b>UA- Year 2 Summer</b>	ECE 320 Electrical Engr. or ME 309 Heat Transfer or MTE 271 Engineering Mat	3 hrs.						
	<b>TOTAL</b>	<b>3 hrs.</b>						
<b>UA – Year 2</b>	AEM 402 Aerospace Design I	3 hrs.			AEM 404 Aerospace Design II	3 hrs.		
	AEM 408 Propulsion	3 hrs.			AEM 451 Structural Design	3 hrs.		
	AEM 468 Flight Dynamics I	3 hrs.			AEM Elective	3 hrs.		
	AEM 495 Professional Dev.	3 hrs.			HU/L/FA	3 hrs.		
	AEM 420 Comp Fluid Dynamics or AEM 461 Comp. Meth Aerospace Structures	3 hrs.			EN 206 Literature II	3 hrs.	EN 212	
	<b>TOTAL</b>	<b>15 hrs.</b>			<b>TOTAL</b>	<b>15 hrs.</b>		