

**UNIVERSITY OF NORTH ALABAMA / UNIVERSITY OF ALABAMA**

**Effective Fall 2014**

**Computer Science / Computer Engineering  
Dual Degree Engineering Program**

	<i>First Semester</i>				<i>Second Semester</i>			
			Grade	Sem/ year			Grade	Sem/ year
<b>UNA – Year 1</b>	EN 111 or EN 121	3 hrs.			EN 112 or EN 122	3 hrs.		
	CH 111 & CH 111L	4 hrs.			CH 112 & CH 112L	4 hrs.		
	MA 125 Calculus I	4 hrs.			MA 126 Calculus II	4 hrs.		
	CS 245 Discrete	3 hrs.			COM 201 Speech	3 hrs.		
	CS 155 Computer Science I	3 hrs.			CS 255 Computer Science II	3 hrs.		
	<b>TOTAL</b>	<b>17 hrs.</b>			<b>TOTAL</b>	<b>17 hrs.</b>		
<b>UNA – Year 2</b>	1 <sup>st</sup> Literature Course	3 hrs.			2nd Literature Course	3 hrs.		
	MA 227 Calculus III	4 hrs.			HI/SB Elec	3 hrs.		
	CS 355 Alg & Data Structures	3 hrs.			CS 310 Comp Org/Assembly	3 hrs.		
	CS 410W Prog Languages	3 hrs.			1 <sup>st</sup> CS Advanced Elective	3 hrs.		
	Fine Arts/Humanities Elec. I	3 hrs.			CS Prog. Lang Elective	3 hrs.		
	<b>TOTAL</b>	<b>16 hrs.</b>			<b>TOTAL</b>	<b>15 hrs.</b>		
<b>UNA – Year 3</b>	CS 311 Comp Architecture	3 hrs.			CS 455 Software Eng	3 hrs.		
	CS 420 Operating Systems	3 hrs.			2 <sup>nd</sup> CS Advanced Elective	3 hrs.		
	MA 237 Linear Alg	3 hrs.			MA 355 Diff Eq	3 hrs.		
	PH 251 Technical Physics I	5 hrs.			PH 252 Technical Physics II	5 hrs.		
	<b>TOTAL</b>	<b>14 hrs.</b>			<b>TOTAL</b>	<b>14 hrs.</b>		
<b>UA – Year 1</b>	EC 225 Electric Circuits	3 hrs.			ECE 332 Electronics I	3 hrs.		
	ECE 380 Digital Logic	3 hrs.			ECE 383 Microcomputers	3 hrs.		
	MA 355 Theory of Probability	3 hrs.			ECE 326 Electric Networks	3 hrs.		
	HI 101 / HI 101-H / HI 201	3 hrs.			HI 102 / HI 102-H / HI 202	3 hrs.		
	Fine Arts/Humanities Elec. II	3 hrs.			Fine Arts/Humanities Elec. III	3 hrs.		
	<b>TOTAL</b>	<b>15 hrs.</b>			<b>TOTAL</b>	<b>15 hrs.</b>		
<b>UA – Year 2</b>	ECE 370 Signals and Systems	3 hrs.			ECE 486 Embedded Systems	3 hrs.		
	ECE 333 Electronics II	3 hrs.			ECE 487 Embedded Systems	1 hrs.		
	ECE 492 Capstone Design I	3 hrs.			ECE 494 Capstone Design II	3 hrs.		
	ECE 480 Digital Sys Design	3 hrs.			CS 457 Database Mgmt Sys	3 hrs.		
	ECE 481 Digital Sys Design Lab	1 hrs.						
	<b>TOTAL</b>	<b>13 hrs.</b>			<b>TOTAL</b>	<b>10 hrs.</b>		

\*UA Courses accepted for completion of UNA BS in CS

- CS General Elective – CS407, CS435, CS460, CS499, ECE380, ECE383, ECE404, ECE485, ECE486 + ECE487
- CS Advanced Electives – CS397, CS475, CS457, CS465, ECE406

Course Notes:

UA CS 100+101+201 (12 hours) satisfied by UNA CS 155 + UNA CS 255 + UNA CS 355 + UNA CS 455 (12 hours)

UA ECE 484 satisfied by UNA CS 311, UA Professional elective satisfied by UNA CH 112

UNA MA 345 satisfied by UA MA 355

UNA CS General elective satisfied by UA course (see above), UNA 3<sup>rd</sup> Advanced elective satisfied by UA CS 457

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