

# **Bachelor of Science in Computer Science APPLIED COMPUTER SCIENCE**

2009-2010 Undergraduate Catalog

# **Degree Progression Plan**

Freshman Year								
1 <sup>st</sup> term			2 <sup>nd</sup> term					
CS 110 Introduction to Computer Science * 3				CS 126	Computer Science I *	3		
MAT 125 or MAT 136	Precalculus or Calculus I (FNRQ) **	4		CS 126L	Computer Science I Lab *	1		
LAN	Modern Language (CU) **/++	4		SE	Science Elective with Lab (SCI: LAB) **/***	4		
LS/DIV	Liberal Studies/ Diversity ***	3		LAN	Modern Language (CU) **/++	4		
NAU 100	Transition to College	1		ENG 105	Critical Reading and Writing (FNRQ)	4		
Total units					Total units	16		

Sophomore Year								
3 <sup>rd</sup> term				4 <sup>th</sup> term				
CS 136	Computer Science II *	3		CS 248	Foundations of Computer Science *	3		
CS 136L	Computer Science II Lab*	1		CS 249	Data Structures *	3		
MAT 226	Discrete Mathematics **	3		SE	Science Elective (SCI:SAS) **/****	3		
SE	Science Elective (SCI: SAS) **/****	3		LAN	Modern Language (CU) **/++	4		
TE	Technical Elective **/+++	3		LS/IA	Liberal Studies /International Awareness **/+	3		
LAN	Modern Language (CU) **/++	4						
1	ts 17			Total units	16	,		

Junior Year								
	5 <sup>th</sup> term	6 <sup>th</sup> term						
CS 301	Social & Ethical Issues *	1	CS 480	Operating Systems *	3			
CS 386	Software Engineering *	3	CS 200	Introduction to Computer Organization *	3			
CENE 225 or STA 270 or STA 275	Engineering Analysis or Applied Statistics or Statistical Analysis **	3	ENG 302W	Technical Writing	3			
TE	Technical Elective **/+++	3	CSE	CS Elective **/++++	3			
CSE	CS Elective **/++++	3	CSE	CS Elective **/++++	3			
IA	International Awareness **	3						
	Total units	16		Total units	15	,		

Senior Year								
7 <sup>th</sup> term			8 <sup>th</sup> term					
CS 345	Databases *	3		CS 476C	Applied Capstone Design *	4		
CSE	CS Elective **/++++	3		CSE	CS Elective **/++++	3		
CSE	CS Elective **/++++	3		TE	Technical Elective **/++++	3		
TE	Technical Elective **/+++	3		LS/IA	Liberal Studies/International Awareness **/+	3		
LS/DIV	Liberal Studies/Diversity ***	3						
	Total units				Total units	13	3	

## Liberal Studies Distribution blocks

AHI (6 units)	SPW (6 units)	CU (6 units)	Science (7 units)	Additional 3 units		
		LAN (4)	Science Elective (4)	to reach 35 total		
		LAN (4)	Science Elective (3)	Science Elective (3)		

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#### PROGRAM INFORMATION

A minimum of 120 units are required for this degree. This progression plan totals 123 but can be completed with less units if the student multiple uses International Awareness, Liberal Studies and Diversity.

- \*You must earn a C or better in each required CS core course and CS 476C.
- \*\*You may have no more than two D's in pre-professional and professional course.
- \*\*\*Take a Liberal Studies course that also satisfies a Diversity requirement.
- \*\*\*\* Science electives include: 4 units of a Lab Science and 6 units of a Science/Applied Science for a total of 10 units.
- + Take a Liberal Studies course in SPW or AHI that also satisfies the International Awareness requirement

International Awareness Courses include 9 units from the following list. Courses that also satisfy liberal studies or diversity are indicated in () with their appropriate distribution block.

ANT 102 (CUG), ANT 103 (CUG), ANT 301 (SPWG), CENS 396, ECO 483, ECO 486, ES 300 (SPWG), GGR 240 (SPW), GGR 241 (SPW), GGR 370W, HIS 251 (SPWG), HIS 314 (SPWG), HIS 332 (SPWG), HUM 261 (CUG), HUM 281 (CUG), HUM 362 (AHIG), HUM 382 (AHI), PHI 150 (AHIG), POS 120 (CU), POS 201(SPW), POS 360 (SPW), POS 361(SPWG), POS 380 (SPW), POS 480, POS 482, REL 150(CUG), SOC 215 (SPWE) or other internationally relevant courses with the department chair's approval.

- ++ 16 units of a modern language is required and at least two semesters must be of the same language
- +++ Technical electives include 12 additional units chosen with your advisor from EE, MAT, PHY, CHM, GGR and BIO as well as from CS elective courses at the 200 level or above. (Other courses may be substituted with the department chair's approval.)
- ++++ CS electives include 18 units of additional CS courses at the 300 level or above, chosen with your academic advisor. (You may also petition to substitute other courses, such as MAT or EE with the department chair's approval.)

### **GENERAL INFORMATION**

- This degree progression plan is to be used in conjunction with the academic catalog and degree progress report.
- Students should see an academic advisor regularly to confirm their academic progress.
- Students must see an academic advisor before enrollment for the 7<sup>th</sup> term in preparation for graduation.
- Many courses have pre-requisites. Please check the academic catalog for pre-requisite and placement information.
- Submit graduation application during 7<sup>th</sup> term.
- Honors students complete different requirements to meet NAU's liberal studies program. Students should consult an Honors Program advisor for complete information on fulfilling Honors Liberal Studies requirements.
- All students are required to complete at least 120 total units which includes:
  - 35 units of liberal studies courses: http://www4.nau.edu/aio/Articulation/LScourselist.htm
  - 6 units of diversity courses (3 units in Global & 3 units in Ethnic). The diversity requirement may be fulfilled in any part of the program of study: <a href="http://www4.nau.edu/aio/Articulation/DiversityCourseList.htm">http://www4.nau.edu/aio/Articulation/DiversityCourseList.htm</a>
  - 30 units of upper division courses (300-400 level), 18 of these units must be taken at NAU
- English placement: http://www.nau.edu/comp/placement.html
- Math placement: <a href="http://www.cefns.nau.edu/Academic/Math/studentInformation/Placement/Placement.shtml">http://www.cefns.nau.edu/Academic/Math/studentInformation/Placement/Placement.shtml</a>

#### **CONTACT INFORMATION**

Engineering Programs Building 69, Room 122A Phone: 928-523-5251 Assistant Chair: Dieter Otte

Phone: 928-523-0876

Email: <u>Dieter.Otte@nau.edu</u>

Debbie Wildermuth Academic Services Coordinator College of Engineering, Forestry, & Natural Sciences Building 21, Room 102

Phone: 928-523-3842

Email: Debbie.Wildermuth@nau.edu

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