# **Additions in GREEN**

## **Deletions in RED**

# **College of Engineering and Computer Science**

This section of the Preliminary 2017-2018 University Catalog includes revisions received after the 2016-2017 catalog's publish date of June 6, 2016. Revisions appear in red.

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# Computer & Electrical Engineering and Computer Science

#### Faculty:

Erdol, N., Chair; Kalva, H., Associate Chair; Zhuang, H., Associate Chair; Aalo, V.; Agarwal, A.; Alhalabi, B. A.; Asghar, W.; Azarderakhsh, R.; Bagby, J.; Bou-Harb, E.; Bullard, L. A.; Cardei, I. E.; Cardei, M.; Cooper, R. B.; Fernandez, E. B.; Fernandez, T.; Furht, B.; Gazourian, M. G., Emeritus.; Glenn, W., Emeritus; Ghoraani, B.; Hallstrom, J.; Hsu, S. C., Emeritus; Huang, S.; Ilyas, M.; Khoshgoftaar, T. M.; Larrondo-Petrie, M.; Levow, R. B.; Liu, F. H.; Mahgoub, I.; Marcovitz, A., Emeritus; Marques, O.; Messenger, R. A., Emeritus; Neelakanta, P.; Nojoumian, M.; Pandya, A. S.; Pavlovic, M.; Peterson, V.; Raviv, D.; Rhodes, W.; Roth, Z.; Shankar, R.; Solomon, M. K., Emeritus; Sorgente, T.; Tang, Y.; Ungvichian, V.; Wang, D.; Wang, X.; Woodworth, J.; Yang, K.; Zilouchian, A.

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Bachelor of Science with Major in Computer Science (Changes effective fall 2016.)

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### Computer Science Electives (Changes effective fall 2016.)

To satisfy the computer science (CS) elective requirement, all students must take 9 credits chosen from Computer Science and Computer Engineering upper-division courses that are not in the above CS core (students can take EGN 4040 and ISM 4133 for CS elective credit). In order to provide advanced content, as well as programming experience in a language other than C/C++, one of these elective courses must be: COP 4020, COP 4593, COP 4703 or CAP 4630. Students seeking a specialty may consider concentrating on one of the following groups of courses; additional courses from these groups may be taken as other electives (note that 5000-level or 6000-level CS courses can be taken as CS electives).

Internet Technology		
Introduction to Data Communications	CNT 4104	3
Introduction to Data and Network Security	CNT 4403	3
Component Program with .NET	COP 4593	3
Applied Database Systems	COP 4703	3
Web Services	COP 4814	3

Applications		
Introduction to Artificial Intelligence	CAP 4630	3
Computer Animation	CAP 4034	3
Mobile App Projects	CAP 4110	3

Computer Graphics Methods (Course no longer offere	ed CAD 4720	
effective summer 2016.)	CAP 4730	) <del>-</del>

Software Engineering		
Software Engineering Project	CEN 4910	3
Object-Oriented Design and Programming	COP 4331	3
Python Programming	COP 4376	3
Advanced Systems Analysis and Design	ISM 4133	3

System Performance		
Introduction to Queueing Theory	MAP 4260	3
Modeling and Simulation of Systems	CAP 4833	3
Introduction to Computer Systems Performance Evaluation	CEN 4400	3

System Programming		
Programming Languages	COP 4020	3
UNIX System Programming	COP 4604	3

Computer Architecture		
Structured Computer Architecture	CDA 4102	3
Introduction to VLSI	CDA 4210	3
CAD-Based Computer Design	CDA 4204	3

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### **Bachelor of Science in Computer Engineering**

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Computer Engineering Semi-Core Courses (5) (select four of the following)		
Mobile App Projects	CAP 4110	3
Structured Computer Architecture	CDA 4102	3
Introduction to Computer Systems Performance Evaluation	CEN 4400	3
Introduction to Embedded System Design	CDA 4630	3
Introduction to VLSI	CDA 4210	3
Introduction to Data Communications	CNT 4104	3
Computer Network Projects	CNT 4713	3
Introduction to Java and Concurrency (Course no longer offered effective summer 2016.)	COP 4633	3
CAD-Based Computer Design	CDA 4204	3
Subtotal		12

pproved by: Department Chair: College Curriculum Chair: College Dean: UUPC Chair: Undergraduate Studies Dean: UFS President:	Date: 12/12/2016 11/7/2016 12/12/2016 12/12/2016 12/12/16 12/12/16
Provost:	