Courses offered in the Department of CS

Catalogue Year: 2019 – 2020

Core Courses (58 Credit Hours / 19 Courses)					Elective Courses (12 Credits)				
Core Courses	Cr.H	Remarks/ Prerequisite (if any)	Offered in Semester Fall /Spring /Summer	Remarks/ cross-listed etc.	Elective Courses	Cr.H	Pre.Req	Offered in Semester	Remarks/ cross-listed etc.
COMP 102	3	-	FA/ SP		CSCS 210	3			
COMP 111	3	COMP 102	FA/ SP		CSCS 306	3		FA	
COMP 113	3	MATH 111/ STAT 115	FA/ SP	MATH 106/ MATH 303	CSCS 310/ MATH310*	3			
COMP 200	3	COMP 111, COMP 113	FA/ SP		CSCS 313	3		FA	
COMP 206	3	MATH 101/ A-level Math	FA/ SP		CSCS 324	3			
COMP 213	3	COMP 200	FA/ SP		CSCS 342	3		FA/SP	
COMP 220	3	COMP 200	FA/ SP		CSCS 351	3		FA/ SP	
COMP 300	3	COMP 111, COMP 206	FA/ SP		CSCS 352	3		FA/ SP	
COMP 301	3	COMP 200, COMP 300	FA/ SP		CSCS 403/ MAH 403*	4		SP	
COMP 302	3	COMP 200	FA/ SP		CSCS 440	3			
COMP 303	3	COMP 200	FA/ SP		CSCS 450	3			
COMP 311	3	COMP 301	FA/ SP		CSCS453	3			
COMP 360	3	COMP 200	FA/ SP		CSCS455	3			
COMP 401	1	COMP 220	FA/ SP		CSCS 457	3			
COMP 405	3	COMP 220	FA/ SP		CSCS 461	3			
COMP 421	3	COMP 311/ STATS 115	FA/ SP		CSCS 464	3			
COMP 451	3	COMP 302	FA/ SP		CSCS 466	3			
COMP 452	3	COMP 301	FA/ SP		CSCS 468	3		FA/ SP	
COMP 497A	3	COMP 213, COMP 220	FA/ SP		COMP 295/495	1/3			
COMP 497 B	3	COMP 497A	FA/ SP		CSCS 365	3			
TOTAL	58					12			

Note:

Requirements of Major:

- Major CGPA of at least 2.0.
- Total of 132 credits including 58 credits of core courses, 22 credits of supporting courses, 12 credits of computing electives

Supporting Courses (also compulsory): MATH111, STAT 115, CSCS 105, CSCS201, CSCS202, CSCS203, CSCS320

Courses for Gen. Education: CSCS105, CSCS100 (to be taken in freshman year)

Transfer to BCS: Minimum CGPA of 3.0 and availability of seats as per catalog

- Specializations & Career opportunities: _____

Roadmap for CS Majors

Catalog year: 2018 - 2019

<table>
<tr><td colspan="10" align="center">Freshmen year</td></tr>
<tr><td colspan="3" align="center">Fall 2019 (1st Semester)</td><td colspan="5" align="center">Spring 2020. (2nd Semester)</td></tr>
<tr><td align="center">Course</td><td align="center">Credit Hr</td><td align="center">Remarks</td><td colspan="3" align="center">Course</td><td align="center">Credit Hr</td><td align="center">Remarks</td></tr>
<tr><td>*UNIV100</td><td>3</td><td></td><td colspan="3">WRCM 102</td><td>3</td><td></td></tr>
<tr><td>WRCM101</td><td>3</td><td></td><td colspan="3">COMP 111</td><td>3</td><td></td></tr>
<tr><td>COMP 102</td><td>3</td><td></td><td colspan="3">MATH 111 or STAT 115 or COMP 113 (GE)</td><td>3</td><td></td></tr>
<tr><td>PHYS 100 or CSCS 105 (GE)</td><td>4</td><td></td><td colspan="3">Gen Ed (NOT Math & Science)</td><td>3</td><td></td></tr>
<tr><td>MATH 101 or MATH 111 or STAT 115 (GE)</td><td>3</td><td></td><td colspan="3">CSCS 105 or CHEM/BIOL lab (GE)</td><td>4</td><td></td></tr>
<tr><td colspan="10" align="center">Sophomore year</td></tr>
<tr><td colspan="3" align="center">Fall 2020 (3rd Semester)</td><td colspan="5" align="center">Spring 2021 (4th Semester)</td></tr>
<tr><td>STAT 115 or COMP 113 or COMP 200</td><td>3</td><td></td><td colspan="3">COMP 200 or COMP 220</td><td>3</td><td></td></tr>
<tr><td>Gen Ed (NOT Math & Science)</td><td>3</td><td></td><td colspan="3">STAT 115 or CHEM/BIOL lab or elective</td><td>3/4</td><td></td></tr>
<tr><td>CSCS 203</td><td>3</td><td></td><td colspan="3">CSCS 201 or 202</td><td>3</td><td></td></tr>
<tr><td>COMP 206</td><td>3</td><td></td><td colspan="3">COMP 300</td><td>3</td><td></td></tr>
<tr><td>CSCS 201 or 202</td><td>3</td><td></td><td colspan="3">CSCS 320</td><td>3</td><td></td></tr>
<tr><td colspan="10" align="center">Junior year</td></tr>
<tr><td colspan="3" align="center">Fall 2021 (5th Semester)</td><td colspan="5" align="center">Spring 2022 (6th Semester)</td></tr>
<tr><td>COMP 213</td><td>3</td><td></td><td colspan="3">COMP 301</td><td>3</td><td></td></tr>
<tr><td>COMP 302</td><td>3</td><td></td><td colspan="3">Major Elective</td><td>3</td><td></td></tr>
<tr><td>COMP 220 or Major Elective</td><td>3</td><td></td><td colspan="3">COMP 405</td><td>3</td><td></td></tr>
<tr><td>COMP 303</td><td>3</td><td></td><td colspan="3">COMP 302</td><td>3</td><td></td></tr>
<tr><td>COMP 360</td><td>3</td><td></td><td colspan="3">Major Elective or Gen Ed (Not Math & Science)</td><td>3</td><td></td></tr>
<tr><td>COMP 401</td><td>1</td><td></td><td colspan="3"></td><td></td><td></td></tr>
<tr><td colspan="10" align="center">Senior year</td></tr>
<tr><td colspan="3" align="center">Fall 2022 (7th Semester)</td><td colspan="5" align="center">Spring 2023 (8th Semester)</td></tr>
<tr><td>COMP 497A</td><td>3</td><td></td><td colspan="3">COMP 497B</td><td>3</td><td></td></tr>
<tr><td>COMP 452</td><td>3</td><td></td><td colspan="3">COMP 421</td><td>3</td><td></td></tr>
<tr><td>COMP 311</td><td>3</td><td></td><td colspan="3">Major Elective</td><td>3</td><td></td></tr>
<tr><td>COMP 451</td><td>3</td><td></td><td colspan="3">Major Elective</td><td>3</td><td></td></tr>
<tr><td>Elective</td><td>3</td><td></td><td colspan="3">Elective</td><td>3</td><td></td></tr>
<tr><td></td><td></td><td></td><td colspan="3"></td><td></td><td></td></tr>
<tr><td>Total Credits:</td><td></td><td></td><td colspan="3"></td><td></td><td></td></tr>
</table>

Important Notes/Guidelines:

- Highlighted in yellow are the core courses.
- Highlighted in green are the supporting courses.
- A student must take at least 12 upper level courses labelled 300/400.

Mission Statement:

The Computer Science Department strives for excellence in creating, applying, and imparting knowledge in computer science through comprehensive educational programs, research and industrial liaison to tackle challenges of tomorrow. Computer Science is a fast-changing field and our program aims to equip students with the fundamental knowledge that enables them to keep abreast of the latest developments and to contribute. DCS has set for itself a set of objectives as mission to meet the goals of the university. These objectives are:

1. To provide a high quality and broad-based undergraduate and graduate education so as to produce graduates in the discipline of computer science who will be able to think critically, successfully solve problems in their professional career, and engage in lifelong self-directed learning.
2. To educate students to be successful leaders and innovators fully aware of their local and global context and capable of meeting complex challenges.
3. To ensure grooming of students so that they have sound moral and ethical values, and thus contributing positively to the uplift of the country.

Higher Education:

FCCU Computer Science graduates can pursue a variety of subjects for their higher education. They can follow Masters and Doctoral studies in Information Technology, Software Engineering, Artificial Intelligence & Machine Learning, Project Management apart from Computer Science

Career Paths:

Our Computer Science graduates have been working in renowned national/international organizations at positions like System Designers, Software Project Managers, Mobile App Developers, Network Administrators, IT Analysists etc. Some have adopted active research paths in Virtual/Augmented Reality, AI, System Design etc.