Mississippi State University

Bachelor of Science - Computer Science

2009-2010

Illustrative Schedule of Courses

Freshman Year

First Semester		Second Semester	
CO 1003 Public Speaking	3	CSE 1384 Inter Computer Programming	4
MA 1713 Calculus I	3	MA 1723 Calculus II	3
CH 1213 Chemistry	3	PH 2213 Physics I	3
CH 1211 Chemistry Lab	1	EN 1113 English Composition II	3
EN 1103 English Composition I	3	Free Elective	3
CSE 1284 Intro Computer Programming	4		
Total Credit Hours	17	Total Credit Hours	16

Sophomore Year

First Semester		Second Semester	
CSE 2383 Data Struct & Ana. of Algorithms	3	CSE 2813 Discrete Structures	3
ECE 3714 Dig. Dev. & Logic Des	4	CSE 3324 Distributed Client/Server Prog.	4
MA 2733 Calculus III	3	ECE 3724 Microprocessors I	4
MA 3113 Linear Algebra	3	Fine Art Elective	3
PH 2223 Physics II	3	Humanities Elective	3
Total Credit Hours	16	Total Credit Hours	17

Junior Year

First Semester		Second Semester	
CSE 4733 Operating Systems	3	CSE 4713 Programming Languages	3
CSE 3813 Formal Languages	3	Computer Science Electives**	3
BIO 1134 Biology I	3	IE 4613 Engineering Statistics I	3
Technical Elective*	4	Social Science Elective	3
International/Intercultural Study	3	International/Intercultural Study	3
Total Credit Hours	16	Total Credit Hours	15

Senior Year

First Semester		Second Semester	
CSE 4833 Intro to Analysis of Algorithms	3	CSE 3981 Social & Ethical Issues	1
Computer Science Electives**	6	ECE 4713 Computer Architecture	3
Technical Elective*	3	Computer Science Electives**	3
Social Science Elective	3	GE 3513 Technical Writing	3
		Humanities Elective	3
		Free Elective	3
Total Credit Hours	15	Total Credit Hours	16
		Total Hours	128

* Select from technical elective list

** Upper-level CSE electives selected from list available in the department.

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Degree Requirements

2009-210

Communication Skills (12 Hours)

- English Composition 6
- Oral Communication (CO 1003) 3
- Technical Writing (GE 3513) 3

Fine Arts, Humanities, Social Studies (21 Hours)

- Fine Arts Elective 3
- Humanities Electives (2) 6
- Social Science Electives (2) 6
- International/Intercultural Studies (select two related courses from list) 6

Natural Sciences (14 Hours)

- Biology (BIO 1134) 4
- Chemistry and lab (CH 1213/1211) 4
- Physics (PH 2213/2223) 6

Mathematics (18 Hours)

- Discrete Math (CSE 2813) 3
- Calculus (MA 1713/1723/2733) 9
- Linear Algebra (MA 3113) 3
- Probability and Statistics (IE 4613) 3

Technical Electives (6 Hours)

- Electives (select from list below) 6

Calculus IV (MA 2743); Differential Equations (MA 3253); Numerical Analysis (MA 4313); Probability (MA 4523); Engineering Economy (IE 3913); Simulation (IE 4773); Project Management (IE 4533); Engineering Administration (IE 4513); Statistics II (IE 4624); Operations Research (IE 4713); Microprocessors II (ECE 4723); Adv. Microprocessors (ECE 4733); Digital Systems Design (ECE 4743); any upper-level computer science course.

Computer Science (51 Hours)

- Introduction to Computer Programming (CSE 1284) 4
- Intermediate Computer Programming (CSE 1384) 4
- Data Structures and Analysis of Algorithms (CSE 2383) 3
- Distributed Client/Server Programming (CSE 3324) 4
- Digital Devices (ECE 3714) 4
- Microprocessors I (ECE 3724) 4
- Formal Languages (CSE 3813) 3
- Social and Ethical Issues (CSE 3981) 1
- Computer Architecture (ECE 4713) 3
- Programming Languages (CSE 4713) 3
- Operating Systems (CSE 4733) 3
- Introduction to Analysis of Algorithms (CSE 4833) 3
- Computer Science Electives (upper level, from approved list) 12
  - Group 1 CSE electives (each student must take at least 2 of these courses):
    - CSE 4153, CSE 4163, CSE 4214, CSE 4413, CSE 4503, CSE 4633
  - Group 2 CSE electives (6 hours):
    - Any Group 1 elective,
    - Any Upper-Level (3000- or 4000-level) CSE course not required elsewhere

Free Electives (6 Hours) 6

Total Hours 128