

**Wright State University, Department of Computer Science and Engineering**  
**Bachelor of Science Degree in Computer Science (ABET-CAC Accredited)**  
 Model Program

Total Hours: 191  
 Effective Starting Spring, 2007

	<b>Fall</b>		<b>Winter</b>		<b>Spring</b>	
	<i>Course</i>	<i>Hours</i>	<i>Course</i>	<i>Hours</i>	<i>Course</i>	<i>Hours</i>
<b>Freshman</b>	CS 240 Computer Programming I	4	CS 241 Computer Programming II	4	CS 242 Computer Programming III	4
	MTH257 Discrete Mathematics	3	MTH229 Calculus I	5	MTH 230 Calculus II	5
	ENG 101 Composition I	4	ENG 102 Composition II	4	General Education	4
	General Education	<u>4</u>	General Education	<u>4</u>	CEG 233 Linux and Windows	<u>4</u>
		15		17		17
<b>Sophomore</b>	CS 400 Data Structures & Algorithms	4	CS/CEG Technical Elective	4	CEG 320 Computer Organization	4
	MTH 231 Calculus III	5	MTH 253 Matrix Algebra	3	CS/CEG Technical Elective	4
	Laboratory Science Sequence (Class 1)	5	Laboratory Science Sequence (Class 2)	5	Laboratory Science Sequence (Class 3)	5
	General Education	<u>4</u>	General Education	<u>4</u>	General Education	<u>4</u>
		18		16		17
<b>Junior</b>	CEG 433 Operating Systems	4	CEG 460 Software Engineering	4	Math/Science Elective	3
	STT 363, STT 360 or ISE 301(Statistics)	3	General Education	4	CS 405 Intro to Database Mgmt	4
	Math/Science Elective	3	General Elective	4	CS/CEG Technical Elective	4
	EGR 335 Technical Communications	3	CS/CEG Technical Elective	<u>4</u>	General Elective	<u>4</u>
	General Elective	<u>4</u>		16		15
		17				
<b>Senior</b>	CS 466 Intro to Formal Languages	4	CS 480 Comparative Languages	4	CS/CEG Technical Electives	8
	General Education	4	CS 415 Social Implications of Comp	3	General Elective	<u>4</u>
	CS/CEG Technical Elective	4	CS/CEG Technical Electives	<u>8</u>		12
	General Elective	<u>4</u>		15		
		16				

**BACHELOR of SCIENCE in COMPUTER SCIENCE (ABET-CAC Accredited)**  
**191 Hours, Effective Spring 2007**

**I. COMPUTER SCIENCE AND ENGR COURSES  
(86 Hrs.)**

**A. Required Computer Science Courses  
(31 Hrs.)**

CS 240 Computer Programming I	4	_____
CS 241 Computer Programming II	4	_____
CS 242 Computer Programming III	4	_____
CS 400 Data Structures and Algorithms	4	_____
CS 405 Intro to Data Base Man. Systems	4	_____
CS 415 Soc. Implications of Computing	3	_____
CS 466 Introduction to Formal Lang.	4	_____
CS 480 Comparative Languages	4	_____

**B. Required Computer Engineering Courses  
(16 Hrs.)**

CEG 233 Linux and Windows	4	_____
CEG 320 Computer Organization	4	_____
CEG 433 Operating Systems I	4	_____
CEG 460 Intro. to Software Engineering	4	_____

**C. CS/CEG Electives (36 Hrs.)**

At least 16 hours must be at the 400 level.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_

**D. Technical Communication (3 Hrs.)**

EGR 335 Technical Communications 3 \_\_\_\_\_

NAME: \_\_\_\_\_

ADVISOR: \_\_\_\_\_

MENTOR: \_\_\_\_\_

Date: \_\_\_\_\_

**II. GENERAL EDUCATION (40 Hrs.)**

**Area I- Communication and Mathematical Skills**

ENG 101 - Composition I	4	_____
ENG 102 - Composition II	4	_____
Mathematics (see required Math/Stat section)		

**Area II – Cultural-Social Foundations-8 Hrs.**

History – Select 1 Course:  
 CLS 150, HST 101, HST 102, HST 103

1. \_\_\_\_\_ 4 \_\_\_\_\_  
 The Non Western World(WI) – Select 1 Course:  
 CSE/CST, RSE/RST, HLT 202, SW 272, URS 200

1. \_\_\_\_\_ 4 \_\_\_\_\_

**Area III – Human Behavior – 8 Hrs.**

Select 2 Courses From *Different* Rows:  
 Econ: EC200 (Some WI), EC 290 (WI)  
 Political Science: PLS 200  
 Psychology: PSY 105  
 Sociology (WI): SOC200, SOC205

1. \_\_\_\_\_ 4 \_\_\_\_\_  
 2. \_\_\_\_\_ 4 \_\_\_\_\_

**Area IV – Human Expression – 4 Hrs.**

Select one course:  
 Great Books (WI):  
 CLS, ENG, PHL or REL 204  
 Fine and Performing Arts:  
 ART, MUS or TH 214, MUS 290, MP 131

1. \_\_\_\_\_ 4 \_\_\_\_\_

**Additional courses from Areas II, III, and IV-8 Hrs.**

Select one course from two of these three areas. Except for Area II, the course selected must come from a different subcategory than the course(s) chosen to meet the area requirement. (See undergraduate catalog-Gen. Ed. Section for complete details).

1. \_\_\_\_\_ 4 \_\_\_\_\_  
 2. \_\_\_\_\_ 4 \_\_\_\_\_

**Area VI – College Component 4 Hrs.**

Select any Area VI College of Liberal Arts course.

1. \_\_\_\_\_ 4 \_\_\_\_\_

**III. MATHEMATICS AND SCIENCE COURSES  
(45 Hrs.)**

**A.Required Mathematics/Statistics Courses  
(24 Hrs.)**

MTH 229 Calculus I	5	_____
MTH 230 Calculus II	5	_____
MTH 231 Calculus III	5	_____
MTH 253 Matrix Algebra	3	_____
MTH 257 Discrete Mathematics	3	_____
STT 363, STT 360, or ISE 301 Statistics		

1. \_\_\_\_\_

**B. Science and Mathematics Electives (21 Hrs.)**

Must include at least 18 hours of science courses, which includes a three quarter laboratory science sequence appropriate for science or engineering majors  
 Laboratory Sequence:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

Additional Science/Math Course(s):

1. \_\_\_\_\_
2. \_\_\_\_\_

**IV. GENERAL ELECTIVES (20 Hrs.)**

Electives may be from any area of study based on policy guidelines.

1. \_\_\_\_\_ 4 \_\_\_\_\_
2. \_\_\_\_\_ 4 \_\_\_\_\_
3. \_\_\_\_\_ 4 \_\_\_\_\_
4. \_\_\_\_\_ 4 \_\_\_\_\_
5. \_\_\_\_\_ 4 \_\_\_\_\_

General Education: Courses must be chosen to satisfy the University General Education requirements.  
 GENERAL ELECTIVES: Courses may be chosen from any area of study. See Policy Guidelines for exceptions.  
 SCIENCE COURSES: Courses must be appropriate for science or engineering majors.  
 CS/CEG ELECTIVES: Courses from Computer Science or Computer Engineering to provide additional breadth in the discipline. See Elective Sheet.  
**ALL ELECTIVE COURSES MUST BE APPROVED BY A DEPARTMENT ADVISOR.**