

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

Total Hours: 191
 Effective Spring, 2007

	Fall		Winter		Spring	
	<i>Course</i>	<i>Hours</i>	<i>Course</i>	<i>Hours</i>	<i>Course</i>	<i>Hours</i>
Freshman	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	CEG 260 Digital Circuits	4
	GEN ED	<u>4</u>	GEN ED	<u>4</u>	CEG 233 Linux and Windows	<u>4</u>
		15		17		17
Sophomore	CS 400 Data Structures & Algorithms	4	EGR 335 Technical Communications	3	MTH 253 Matrix Algebra	3
	MTH 231 Calculus III	5	MTH 233 Differential Equations	5	CEG 360 Digital Systems Design	4
	PHY 240 Physics I	4	PHY 242 Physics II	4	PHY 244 Physics III	5
	PHY 200 Physics Lab	<u>1</u>	PHY 202 Physics Lab	1	PHY 204 Physics Lab	1
		14	GEN ED	<u>4</u>	GEN ED	<u>4</u>
				17		17
Junior	EE 301 Circuits I	4	EE 321 Linear Systems I	4	CEG 402 Intro. to Computer Networks	4
	EE 302 Circuits I Lab	1	CEG 433 Operating Systems	4	EE 331 Electronic Devices	3
	CEG 320 Computer Organization	4	General Elective	4	EE 332 Electronic Devices Lab	1
	CS/CEG Technical Elective	4	CS/CEG Technical Elective	<u>4</u>	GEN ED	4
	STT 363 or ISE 301 or STT 360 Stats.	<u>3</u>		16	General Elective	<u>4</u>
		16				16
Senior	CEG 453 Embedded Systems	4	CEG 498 Team Projects II	4	CS 415 Social Implications of Comp	3
	CEG 498 Team Projects I	4	GEN EDs	8	CS/CEG Technical Elective	4
	GEN ED	4			Math/Science Elective	3
	General Elective	<u>4</u>	CS/CEG Technical Elective	<u>4</u>	General Elective	<u>4</u>
		16		16		14

Note: This schedule is for planning purposes only and may be changed as requirements change. Also, consult the Tentative Projected Schedule for planned CS and CEG course offerings.

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

I. COMPUTER SCIENCE AND ENGINEERING COURSES

- A. Required Computer Science Courses (19 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 415 Social Implications of Computing 3 ___

- B. Required Computer Engineering Courses (36 Hrs.)**
 CEG 233 Linux and Windows 4 ___
 CEG 260 Digital Circuits 4 ___
 CEG 320 Computer Organization. 4 ___
 CEG 360 Digital System Design 4 ___
 CEG 402 Intro to Computer Networks 4 ___
 CEG 433 Operating Systems I 4 ___
 CEG 453 Embedded Systems 4 ___
 CEG 498/499 Team Projects I 4 ___
 CEG 498/499 Team Projects II 4 ___

- C. Technical Electives (16 Hrs.) 400 Level**
 1. _____ 4 ___
 2. _____ 4 ___
 3. _____ 4 ___
 4. _____ 4 ___

- D. Other Required Engineering Courses (13 Hrs.)**
 EE 301 Circuit Analysis I 4 ___
 EE 302 Circuit Analysis I Lab 1 ___
 EE 321 Linear Systems I 4 ___
 EE 331 Electronic Devices 3 ___
 EE 332 Electronic Devices Lab 1 ___

- E. Technical Communication (3 Hrs.)**
 EGR 335 Technical Communications 3 ___

II.GENERAL EDUCATION (40 Hrs.)

- Area I - Communication Skills**
 ENG 101 - Composition I 4 ___
 ENG 102 - Composition II 4 ___
 MATHEMATICS –
 See required Mathematics courses

- Area II – Cultural-Social Foundations-8 Hrs.**
 History – Select 1Course:
 CLS 150, HST 101, HST 102, HST 103
 1. _____ 4 ___
 The Non Western World(WI) – Select 1Course:
 CSE/CST, RSE/RST, HLT 202, URS 200

1. _____ 4 ___
Area III – Human Behavior – 8 Hrs.
 Select 2 Courses From *Different* Rows:
 Economics: EC200(Some WI), EC 290 (WI)
 Political Science: PLS 200
 Psychology: PSY 105
 Sociology (WI): SOC 200, SOC 205

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,TH 214, MP 131 or MUS 290

1. _____ 4 ___
Additional courses from Areas II, III, and IV-8Hrs.
 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.

- EGR 190 Fundamentals of Eng. and Computer Science I * OR ISE 210, EC 290, PSY 110, URS 200 4 ___

*Must have less than 45 credit Hrs.

Must select 4 Writing Intensive (WI) courses from areas II, III, IV and Physics

III. MATHEMATICS /SCIENCE COURSES (48 Hrs.)

- A. Required Mathematics Courses (29 Hrs.)**
 MTH 229 Calculus I 5 ___
 MTH 230 Calculus II 5 ___
 MTH 231 Calculus III 5 ___
 MTH 233 Differential Equations 5 ___
 MTH 253 Matrix Algebra 3 ___
 MTH 257 Discrete Mathematics 3 ___
 STT 363, STT 360, or ISE 301 Statistics 3 ___

- B. Required Physics Courses (16 Hrs.)**
 PHY 240 Physics I 4 ___
 PHY 200 Physics I Lab 1 ___
 PHY 242 Physics II 4 ___
 PHY 202 Physics II Lab 1 ___
 PHY 244 Physics III 5 ___
 PHY 204 Physics III Lab 1 ___

C. Mathematics or Science Elective (3 Hrs.)

1. _____ 4 ___
IV. GENERAL ELECTIVES (16 HRS.)
 Electives may be from any area of study.

1. _____ 4 ___
 2. _____ 4 ___
 3. _____ 4 ___
 4. _____ 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 based on Department Elective Policies.
 Math/Science Course: Course must be appropriate for science or engineering majors.
 Technical Electives: Courses must be chosen from approved packages.
ALL ELECTIVE COURSES MUST BE APPROVED BY A DEPARTMENT ADVISOR.

Name: _____ Date: _____

Advisor/Mentor: _____