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

Total Hours: 191
Effective Spring, 2007

	Fall		**Winter**		**Spring**	
	Course	*Hours*	*Course*	*Hours*	*Course*	*Hours*
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	4	GEN ED	4	CEG 233 Linux and Windows	4
		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	1	PHY 202 Physics Lab	1	PHY 204 Physics Lab	1
		14	GEN ED	4	GEN ED	4
				17		17
Junior	EE 301 Circuits I	4	EE 321 Linear Systems I	4	CEG 402 Intro. To Computer Network	4
	EE 302 Circuits I Lab	1	GEN ED	4	EE 331 Electronic Devices	3
	CEG 320 Computer Organization	4	CEG 433 Operating Systems	4	EE 332 Electronic Devices Lab	1
	CEG 453 Embedded Systems	4	General Elective	4	GEN ED	4
	STT 363 or STT360 or ISE 01 (Statistics)	3		16	CEG 403 Personal Area Networks	4
		16				16
Senior	CEG 498 Team Projects I	4	CEG 498 Team Projects II	4	CS 415 Social Implications of Comp	3
	CEG 426 Mobile Computing	4	GEN ED	4	General Elective	4
	GEN ED	4	General Elective	4	Math/Science Elective	3
	EE 421 Digital Communications	4	CEG 404 Wireless Sensor Networks	4	General Elective	4
		16		16		14

Note: This schedule is for planning purposes only and my be changed as requirements change. Also, consult the Tentative Projected Schedule for planned CS and CEG course offerings.
Rev:8/12/09

BACHELOR OF SCIENCE in COMPUTER ENGINEERING- Wireless Architecture Concentration ABET Accredited)
191 Hours, Effective Spring 2007

I . COMPUTER SCIENCE AND ENGINEERING COURSES

A**. Required Computer Science Courses (19 hours)**

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 hours)**

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**. Wireless Concentration (16 hours)**

CEG 403 Personal Area Networks	4 ___
CEG 404 Wireless Sensor Networks	4 ___
CEG 436 Mobile Computing	4 ___
EE 421 Digital Communications	4 ___

D**. Other Required Engineering Courses (13 hours)**

EE 301 Circuit Analysis I	3 ___
EE302 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 hours)**

EGR 335 Technical Communications	3 ___

II.GENERAL EDUCATION (40 hours)

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, SW 272, 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
*Must have less than 45 credit hours

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

III. MATHEMATICS /SCIENCE COURSES (48 HOURS)

A. Required Mathematics Courses (29 hours)

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
1. _____

B. Required Physics Courses (16 hours)

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 hours)
1. _____ ___ ___

IV. GENERAL ELECTIVES (16 HOURS)
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 policy sheet.
MATH/SCIENCE COURSES: Courses must be appropriate for science or engineering majors and satisfy the General Education science requirements.
ALL ELECTIVE COURSES MUST BE APPROVED BY A DEPARTMENTADVISOR.

Name_____
Advisor_____
Mentor_____
Date_____