

# Telecommunications Engineering Curriculum (2003)

## School of Engineering Department of Computer Engineering Jackson State University Curriculum Sheet

Major		Degree	
Telecommunication Engineering		Bachelor of Telecommunication Engineering	
<u>FRESHMAN YEAR</u>		<u>FALL</u>	<u>SPRING</u>
MATH 231__, 232__	Calculus I and II	3	3
MATL 231__, 232__	Calculus I and II Labs	1	1
ENG 104__, 105__	Composition and Literature	3	3
HIST 101__, 102__	History of Civilization	3	3
EN 105__	Programming for Engineers		3
CHEM 141__, CHML 141__	General Chemistry I & Lab	4	
UNIV 100__	Concepts for Success in College	2	
PHY 211__, PHYL 211__	General Physics I and Lab	—	<u>5</u>
		16	18
<u>SOPHOMORE YEAR</u>			
MATH 233__, MATL 233__	Calculus III & Lab	4	
PHY 212__, PHYL 212__	General Physics II & Lab	5	
CSC 119__, CSCL 119	Object Oriented Programming and Lab	4	
EN 212__	Digital Logic	3	
EN 222__	Eng Mechanics I	3	
ENL212	Digital Logic Lab		1
MATH 368__	Ordinary Differential Equations I		3
EN 223__	Eng Mechanics II		3
ENG__	English Option		3
EN 220__, EN 220__	Circuit Theory & Lab		4
EN 201__	Engineering Graphics		2
EN 240__	Strength of Materials	—	<u>3</u>
		19	19
<u>JUNIOR YEAR</u>			
CPE 351__	Signals and Systems	3	
MATH 355__	Probability & Statistics	3	
EN 250__, ENL 250__	Linear Systems and Lab	4	
CPE 355__	Control Systems	3	
CPE 312__, CPEL 312__	Computer Organization & Lab	4	
SPCH__	Speech Option		3
CPE 345__	Electromagnetic Fields		3
CPE360__	Embedded Microprocessor Systems		3
EN 370__	Engineering Systems Clinic		3
CPE 330__, CPEL330__	Electronics and Lab	—	<u>4</u>
		16	17
<u>SENIOR YEAR</u>			
CPE 490__	Capstone Design I	2	
CPE 440__	Communication Systems	3	
EN 355	Engineering Economy	3	
Telecom__	Elective	3	
PHIL__	Philosophy Option	3	
CPE 491__	Capstone Design II		3
Telecom__	Elective		3
Telecom__	Elective		3
ART__	Fine Arts Option	—	<u>3</u>
		14	12

**Total Hours: 131**

Grade "C" or better is required for all courses

**Technical Electives:**

CPE 451 Digital Signal Processing.  
 CPE 442 Digital Communications  
 CPE 445 Applied Electromagnetics  
 CPE 446 Wireless Communications  
 CPE 447 Telecom Switching & Transmission.  
 CPE 441 Computer Networks.  
 CPE 492 Special Studies  
 CPE 493 Special Topics  
 Other courses require Chair's approval.

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Since the Department has introduced a new curriculum in 2006. The following courses are no longer required in the new curriculum:

EN 223 (3) Engineering Mechanics II  
 EN 240 (3) Strength of Materials  
 EN 220 (3) Linear Systems  
 EN 250 (3) Engineering Systems Clinic

Students who are following this 2003 curriculum have the option of substituting one or more of the above courses by one or more of the following course:

CPE 451 (3) Digital Signal Processing  
 CPE 441 (3) Computer Networks  
 CPE 351 (3) Signals and systems  
 EN 252 (3) Engineering Analysis  
 Other course with the approval of the Department.

**Speech Options**

SPCH 201 Speech Arts  
 SPCH 300 Introduction to Organization  
 Communication  
 SPCH 334 Argumentation and Debate  
 SPCH 335 Persuasion  
 SPCH 430 Small Group Discussion

**Philosophy Options**

PHIL 301 Introduction to Philosophy  
 PHIL 416 Logic  
 PHIL 308 Aesthetics  
 PHIL 309 Ethics

**Humanities And Fine Arts**

ART 206 Art Appreciation  
 MUS 205 Music Appreciation  
 DR 201 Introduction to Drama  
 ENG 201/202 Humanities  
 ENG 205 World Literature  
 FR 101/102 Elementary French  
 FR 201/202 Intermediate French  
 FR 213 French Phonetic Reading  
 SP 101/102 Elementary Spanish  
 SP 201/202 Intermediate Spanish  
 \*Note-students may take the equivalent of any foreign language the University offers.

**English Options**

ENG 213 Professional Writing  
 ENG 206 Literature of Science  
 ENG 205 World Literature

**Additional Requirements**

ENG 002 Required for students with an ACT English subtest score of 16 or less. Strongly encouraged for students with English subtest score of 19 or less.

MATH 004 Required for students with an ACT Mathematics subtest score of 16 or less. Strongly encouraged for students with Mathematics subtest score of 19 or less.

RE 002 Required for students with an ACT Reading subtest score of 16 or less. Strongly encouraged for students with Reading subtest score of 19 or less.

GNST 101,102 Required for students taking two or more intermediate courses. Students in the Academic Support Program will not be permitted to take more than 15 semester hours, including intermediate courses and the Academic Support Program.

Note: (a) Students who transfer 12 or more hours of college credit are exempt from UNIV 100. (b) Students are required to take the Mathematics Placement Test to determine if they need to take any math courses before taking Math 231-Calculus I.

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## Pre-requisites Flow Chart for required Courses

