Template for Electrical & Computer Engineering Major (ECE)

MATH and Basic Science	**Semester**	**Notes**
MATH 31		
MATH 32		
MATH 103		
MATH 107		
MATH 108		
STA 113		STA 113 recommended but students may sub MATH 135 *or* ECE 255
CHEM 21L *or* 31L		AP credit CHEM 19 is also acceptable
PHYSICS 61L		Matriculating students who have AP credit for PHYSICS 61L (but not 62L) take PHYSICS 62L; those who have AP for PHYSICS 61L & 62L take PHYSICS 63L; and international students who have IPCs for GCE A-level physics take PHYSICS 63L *or* 143.
PHYSICS 62L		
BIOLOGY 25L *or* 147		AP credit BIOLOGY 19 is also acceptable
Engineering Topics		
ECE 27L		
ECE 51L		
ECE 52L		
ECE 53L		
ECE 54L		
ECE Elective		Any ECE course at 100 level or above except 148L, which latter course may be taken as a general elective
ECE Elective		
ECE Concentration Elective 1		Four approved concentration electives, with two different Areas of Concentration represented and at least two courses in one of the elected areas (3+1, 2+2, 2+1+1)
ECE Concentration Elective 2		
ECE Concentration Elective 3		
ECE Concentration Elective 4		
ECE Design Elective		Course from Approved List (ECE 123, 135, 154, 164, 251, & 261) must be taken in semester in which student has *Senior status*
EGR 53L		Students matriculating prior to 2004 may substitute a free elective
COMPSCI 100E or 100		EGR 53L recommended before COMPSCI 100E/100
Other General Education		
WRITING 20		University writing program, required first year
SSH 1		SSH choices must cover 3 of 4 Areas of Knowledge (ALP, CZ, FL, SS), must include at least one SS course and must include at least two courses from a single department (with at least one at the 100 or higher level).
SSH 2		
SSH 3		
SSH 4		
SSH 5		
Elective		
Elective		
Elective		
Elective		

Electrical and Computer Engineering (ECE) Major
with a Minor in Biology (BIOLOGY)

MATH and Basic Science	**Semester**	**Notes**
MATH 31		
MATH 32		
MATH 103		
MATH 107		
MATH 108		
STA 113		STA 113 is recommended but students may sub MATH 135/ECE 255
CHEM 21L *or* 31L		AP credit CHEM 19 is also acceptable
PHYSICS 61L		Matriculating students who have AP credit for PHYSICS 61L (but not 62L) take PHYSICS 62L; those who have AP for PHYSICS 61L & 62L take PHYSICS 63L; and international students who have IPCs for GCE A-level physics take PHYSICS 63L or 143.
PHYSICS 62L		
BIOLOGY 25L *or* 147		AP credit BIOLOGY 19 is ***not*** acceptable.
BIOLOGY 26L *or* BIOLOGY Elective		Electives at the 100 level in biology. For the Minor, a minimum of 3 of these must be in BIOLOGY, but one Elective may be from approved courses in the basic science departments of the School of Medicine or from approved courses of a basic biological character in related departments or an approved independent-study or tutorial course. It is strongly recommended that students discuss their biology course selections with the Directory of Undergraduate Studies (DUS) in BIOLOGY.
BIOLOGY Elective		
BIOLOGY Elective		
BIOLOGY Elective		
Engineering Topics		
ECE 27L		
ECE 51L		
ECE 52L		
ECE 53L		
ECE 54L		
ECE Elective		Any ECE course at 100 level or above except 148L, which latter course may be taken as a general elective
ECE Elective		
ECE Concentration Elective 1		Four approved concentration electives, with two different Areas of Concentration represented and at least two courses in one of the elected areas (3+1, 2+2, 2+1+1)
ECE Concentration Elective 2		
ECE Concentration Elective 3		
ECE Concentration Elective 4		
ECE Design Elective		Course from Approved List (ECE 123, 135, 154, 164, 251, & 261) must be taken in semester in which student has Senior status
EGR 53L		Students matriculating prior to 2004 may substitute a free elective
COMPSCI 100E *or* 100		EGR 53L recommended before COMPSCI 100E/100
Other General Education		
WRITING 20		University writing program, required first year
SSH 1		SSH choices must cover 3 of 4 Areas of Knowledge (ALP, CZ, FL, SS), must include at least one SS course and must include at least two courses from a single department (with at least one at the 100 or higher level).
SSH 2		
SSH 3		
SSH 4		
SSH 5		

Electrical & Computer Engineering and Biomedical Engineering
(ECE-BME) Dual Major (Classes 2010 and 2011 only)

Math and Basic Science	**Semester**	**Notes**
MATH 31		
MATH 32		
MATH 103		
MATH 107		
MATH 108		
STA 113		
CHEM 21L or 31L		All BME majors are required to take two CHEM courses. Students who receive AP credit (CHEM 19) must take a 2nd course typically CHEM 22L or CHEM 23L
CHEM 22L *or* 31L *or* 151L		
PHYSICS 61L		Matriculating students who have AP credit for PHYSICS 61L (but not 62L) take PHYSICS 62L; those who have AP for PHYSICS 61L & 62L take PHYSICS 63L; and international students who have IPCs for GCE A-level physics take PHYSICS 63L or 143.
PHYSICS 62L		
BIOLOGY 25L		AP BIOLOGY 19 is acceptable, but not BIOLOGY 147.
Life Science		Choose from approved list in BME Undergraduate Program Handbook.
Engineering Topics		
ECE 27L		
ECE 51L		
ECE 52L		
ECE 53L		
ECE 54L		Students who successfully completed BME 171 in **Spring 2006 or earlier** need not take ECE 54L
ECE Concentration Elective		Two approved concentration electives in *one* Area of ECE Concentration.
ECE Concentration Elective		
ECE Elective		Any ECE course at 100 level or above except 148L, which latter course may be taken as a general elective
BME 110L or EGR 75L		
BME 83L or ME 83L		If BME 83L is elected, take BME 101L or EGR 75L first.
BME 154L		
BME 100L		
BME 101L		
BME-ECE Design Elective		BME 236L, BME 261L *or* BME264L, to be taken in semester when student has *Senior status.*
BME Elective		
BME Elective		At least one BME elective must be at the 200 level
EGR 53L		Students matriculating prior to 2004 are not required to take EGR 53L
CPS 100E or 100		
Other General Education		
Writing 20		University writing program, required first year
SSH1		SSH choices must cover 3 of 4 Areas of Knowledge (ALP, CZ, FL, SS), must include at least one SS course and must include at least two courses from a single department (with at least one at the 100 or higher level).
SSH2		
SSH3		
SSH4		
SSH5		

Electrical & Computer Engineering and Biomedical Engineering
(ECE-BME) Dual Major (Classes 2012 and after)

Math and Basic Science	**Semester**	**Notes**
MATH 31		
MATH 32		
MATH 103		
MATH 107		
MATH 108		
STA 113		
CHEM 21L *or* 31L *or 43L*		All BME majors are required to take two CHEM courses. Students who have AP credit (CHEM 19) would normally start with CHEM 22L or 32L.
CHEM 22L *or* 32L *or* 151L		
PHYSICS 61L		Matriculating students who have AP credit for PHYSICS 61L (but not 62L) take PHYSICS 62L; those who have AP for PHYSICS 61L & 62L take PHYSICS 63L; international students who have IPCs for GCE A-level physics take PHYSICS 63L or 143 (PHYSICS 41L/42L acceptable for transfers from Trinity College.)
PHYSICS 62L		
BIOLOGY 25L		AP BIOLOGY 19 is acceptable, but not BIOLOGY 147.
Physiology *or* Life Science		If BME 233 is elected, choose from the approved list of Physiology Electives; if BME 201L is elected, choose from the approved list of Life Science Electives. See both lists in the BME Undergraduate Program Handbook.
Engineering Topics		
ECE 27L		
ECE 51L		
ECE 52L		
ECE 53L		
ECE 54L		Students who successfully completed BME 171 in **Spring 2006 or earlier** need not take ECE 54L
ECE Concentration Elective		Two approved concentration electives in *one* Area of ECE Concentration.
ECE Concentration Elective		
ECE Elective		Any ECE course at 100 level or above except 148L, which latter course may be taken as a general elective
BME 110L or EGR 75L		
BME 83L or ME 83L		If ME 83L is elected, take EGR 75 or BME 110 first.
BME 154L		
BME 100L		
BME 201L *or* BME 233		
BME-ECE Design Elective		BME 236L, BME 261L or BME264L, to be taken in semester when student has Senior status.
BME Elective		
BME Elective		At least one BME elective must be at the 200 level
EGR 53L		Students matriculating prior to 2004 are not required to take EGR 53L
CPS 100E or 100		
Other General Education		
Writing 20		University writing program, required first year
SSH1		SSH choices must cover 3 of 4 Areas of Knowledge (ALP, CZ, FL, SS), must include at least one SS course and must include at least two courses from a single department (with at least one at the 100 or higher level).
SSH2		
SSH3		
SSH4		
SSH5		

Electrical & Computer Engineering and Computer Science
(ECE-COMPSCI) Dual Major

Math and Basic Science	**Semester**	**Notes**
MATH 31		
MATH 32		
MATH 103		
MATH 107		
MATH 108		
STA 113		STA 113 is recommended but students may sub MATH 135/ECE 255
CHEM 21L or 31L		AP credit CHEM 19 is also acceptable
PHYSICS 61L		Matriculating students who have AP credit for PHYSICS 61L (but not 62L) take PHYSICS 62L; those who have AP for PHYSICS 61L & 62L take PHYSICS 63L; and international students who have IPCs for GCE A-level physics take PHYSICS 63L or 143.
PHYSICS 62L		
BIOLOGY 25L		AP credit BIOLOGY 19 is also acceptable
Engineering Topics		
ECE 27L		
ECE 51L		
ECE 52L		
ECE 53L		
ECE 54L		
ECE 152		
ECE Digital Systems Elective		
ECE Elective		
ECE Elective		
ECE Concentration Elective		Excluding Digital Systems, which is built into this program
ECE/COMPSCI Design Elective		Course from Approved List (ECE 135, 154, 251, & 261) must be taken in semester in which student has *Senior status*
EGR 53L		EGR 53L recommended before COMPSCI 100E,
COMPSCI 100E		Additional COMPSCI elective required if AP credit for COMPSCI 100E/100
COMPSCI 108		
COMPSCI 110 (C-L ECE 153)		
COMPSCI Elective		COMPSCI 130, 140, or 150
COMPSCI Elective		COMPSCI 100 level or higher
Other General Education		
Writing 20		University writing program, required first year
SSH1		SSH choices must cover 3 of 4 Areas of Knowledge (ALP, CZ, FL, SS), must include at least one SS course and must include at least two courses from a single department (with at least one at the 100 or higher level).
SSH2		
SSH3		
SSH4		
SSH5		
Elective		

Electrical and Computer Engineering (ECE)
with a Dual Major in Economics (ECON)

MATH and Basic Science	**Semester**	**Notes**
MATH 31		
MATH 32		
MATH 103		
MATH 107		
MATH 108		
STA 113		STA 113 is recommended but students may sub MATH 135/ECE 255
CHEM 21L *or* 31L		AP credit CHEM 19 is also acceptable
PHYSICS 61L		Matriculating students who have AP credit for PHYSICS 61L (but not 62L) take PHYSICS 62L; those who have AP for PHYSICS 61L & 62L take PHYSICS 63L; and international students who have IPCs for GCE A-level physics take PHYSICS 63L or 143.
PHYSICS 62L		
BIOLOGY 25L *or* 147		AP credit BIOLOGY 19 is also acceptable
Engineering Topics		
ECE 27L		
ECE 51L		
ECE 52L		
ECE 53L		
ECE 54L		
ECE Elective		Any ECE course at 100 level or above except 148L, which latter course may be taken as a general elective
ECE Elective		
ECE Concentration Elective 1		Four approved concentration electives, with two different Areas of Concentration represented and at least two courses in one of the elected areas (3+1, 2+2, 2+1+1)
ECE Concentration Elective 2		
ECE Concentration Elective 3		
ECE Concentration Elective 4		
ECE Design Elective		Course from Approved List (ECE 123, 135, 154, 164, 251, & 261) must be taken in semester in which student has Senior status
EGR 53L		Students matriculating prior to 2004 may substitute a free elective
COMPSCI 100E or 100		EGR 53L recommended before COMPSCI 100E/100
Other General Education		
WRITING 20		University writing program, required first year
ECON 51D		
ECON 55D		
ECON 105D		
ECON 110D		
ECON 139D		
ECON Elective		Any ECON course at the 100 level or above, excluding ECON 151, 182, 183 & 888. **Students are strongly advised to discuss options with the ECON DUS.** It may be possible to choose ECON (SS) courses that are also in one of the required SS-H (ALP, CZ, FL) areas.
ECON Elective		
ECON Elective		
ECON Elective		
ECON Elective		
SS-H 1		SS-H choices must cover 3 of 4 Areas of Knowledge (ALP, CZ, FL, SS), must include at least one SS course and must include at least two courses from a single department (with at least one at the 100 or higher level). The ECON courses are SS courses. Depending upon ECON Elective choices and AP credits (up to 2), SS-H courses might become Free Electives or reduce the load in 5-course semesters.
SS-H 2		
SS-H 3		
NOTE: See the NOTES attached to the sample program for suggestions on how to optimize course choices.		

Electridcal and Computer Engineering (ECE) Major
with a Minor in Economics (ECON)

MATH and Basic Science	**Semester**	**Notes**
MATH 31		
MATH 32		
MATH 103		
MATH 107		
MATH 108		
STA 113		STA 113 is recommended but students may sub MATH 135/ECE 255
CHEM 21L *or* 31L		AP credit CHEM 19 is also acceptable
PHYSICS 61L		Matriculating students who have AP credit for PHYSICS 61L (but not 62L) take PHYSICS 62L; those who have AP for PHYSICS 61L & 62L take PHYSICS 63L; and international students who have IPCs for GCE A-level physics take PHYSICS 63L or 143.
PHYSICS 62L		
BIOLOGY 25L *or* 147		AP credit BIOLOGY 19 is also acceptable
Engineering Topics		
ECE 27L		
ECE 51L		
ECE 52L		
ECE 53L		
ECE 54L		
ECE Elective		Any ECE course at 100 level or above except 148L, which latter course may be taken as a general elective
ECE Elective		
ECE Concentration Elective 1		Four approved concentration electives, with two different Areas of Concentration represented and at least two courses in one of the elected areas (3+1, 2+2, 2+1+1)
ECE Concentration Elective 2		
ECE Concentration Elective 3		
ECE Concentration Elective 4		
ECE Design Elective		Course from Approved List (ECE 123, 135, 154, 164, 251, & 261) must be taken in semester in which student has Senior status
EGR 53L		Students matriculating prior to 2004 may substitute a free elective
COMPSCI 100E *or* 100		EGR 53L recommended before COMPSCI 100E/100
Other General Education		
WRITING 20		University writing program, required first year
ECON 51D		
ECON 55D		
ECON Elective		Any ECON course at the 100 level or above, excluding ECON 182 and 183. Students are strongly advised to discuss options with the ECON DUS. It may be possible to choose ECON (SS) courses that are also in one of the required SS-H (ALP, CZ, FL) areas.
ECON Elective		
ECON Elective		
SS-H 1		SS-H choices must cover 3 of 4 Areas of Knowledge (ALP, CZ, FL, SS), must include at least one SS course and must include at least two courses from a single department (with at least one at the 100 or higher level). The ECON courses are SS courses. Depending upon ECON Elective choices and AP credits (up to 2), SS-H courses might become Free Electives or reduce the load in 5-course semesters.
SS-H 2		
SS-H 3		
Elective		

Electrical and Computer Engineering Major (ECE)
with a Junior Fall Semester at the Duke Marine Lab

MATH and Basic Science	**Semester**	**Notes**
MATH 31		
MATH 32		
MATH 103		
MATH 107		
MATH 108		
STA 113		STA 113 is recommended but students may sub MATH 135/ECE 255
CHEM 21L *or* 31L		AP credit CHEM 19 is also acceptable
PHYSICS 61L		Matriculating students who have AP credit for PHYSICS 61L (but not 62L) take PHYSICS 62L; those who have AP for PHYSICS 61L & 62L take PHYSICS 63L; and international students who have IPCs for GCE A-level physics take PHYSICS 63L or 143.
PHYSICS 62L		
BIOLOGY 25L *or* 147		AP credit BIOLOGY 19 is also acceptable
Engineering Topics		
ECE 27L		
ECE 51L		
ECE 52L		
ECE 53L		
ECE 54L		
ECE Elective		Any ECE course at 100 level or above except 148L, which latter course may be taken as a general elective
ECE 191/2 Independent Study		ECE-relevant Marine Lab Application
ECE Concentration Elective 1		Four approved concentration electives, with two different Areas of Concentration represented and at least two courses in one of the elected areas (3+1, 2+2, 2+1+1)
ECE Concentration Elective 2		
ECE Concentration Elective 3		
ECE Concentration Elective 4		
Approved ECE Design Elective		Course from Approved List (ECE 123, 135, 154, 164, 251, & 261) must be taken in semester in which student has Senior status
EGR 53L		Students matriculating prior to 2004 may substitute a free elective
COMPSCI 100E *or* 100		EGR 53L recommended before COMPSCI 100E/100
Other General Education		
WRITING 20		University writing program, required first year
ENVIRON 175		Marine Lab Policy
SS-H 1		SSH choices must cover 3 of 4 Areas of Knowledge (ALP, CZ, FL, SS), must include at least one SS course and must include at least two courses from a single department (with at least one at the 100 or higher level).
SS-H 2		
SS-H 3		
SS-H 4		
SS-H 5		
Elective		
Elective		
Elective		

Electrical & Computer Engineering (ECE)
and Mathematics (MATH) Dual Major

MATH and Basic Science	**Semester**	**Notes**
MATH 31		
MATH 32		
MATH 103		
MATH 104		
MATH 105		
MATH 107		
MATH 108		
MATH 121		Modern Algebra, or MATH 200 Algebraic Structures I
MATH 131		
MATH 133		
MATH 135		
MATH 139		Advanced Calculus I, or MATH 203, Basic Analysis I
MATH Elective		Three courses from MATH 128, 132S, 136, 160S, 181, 201, 204, 205, 206, 215 and 216, with at least one from MATH 136, 181, 201, 204, 205, 206, 215 or 216. If MATH 200 or 203 are elected (for MATH 121 or 139), consider MATH 201 and 204 as electives.
MATH Elective		
MATH Elective		
CHEM 21L or 31L		AP credit CHEM 19 is also acceptable
PHYSICS 61L		Matriculating students who have AP credit for PHYSICS 61L (but not 62L) take PHYSICS 62L; those who have AP for PHYSICS 61L & 62L take PHYSICS 63L; and international students who have IPCs for GCE A-level physics take PHYSICS 63L or 143.
PHYSICS 62L		
BIOLOGY 25L *or* 147		AP credit BIOLOGY 19 is also acceptable
Engineering Topics		
ECE 27L		
ECE 51L		
ECE 52L		
ECE 53L		
ECE 54L		
ECE Elective		Any ECE course at 100 level or above except 148L, which latter course may be taken as a general elective
ECE Elective		
ECE Concentration Elective 1		Four approved concentration electives, with two different Areas of Concentration represented and at least two courses in one of the elected areas (3+1, 2+2, 2+1+1)
ECE Concentration Elective 2		
ECE Concentration Elective 3		
ECE Concentration Elective 4		
ECE Design Elective		Course from Approved List (ECE 123, 135, 154, 164, 251, & 261) must be taken in semester in which student has Senior status
EGR 53L		
COMPSCI 100E or 100		EGR 53L recommended before COMPSCI 100E/100
Other General Education		
WRITING 20		University writing program, required first year
SSH 1		SSH choices must cover 3 of 4 Areas of Knowledge (ALP, CZ, FL, SS), must include at least one SS course and must include at least two courses from a single department (with at least one at the 100 or higher level).
SSH 2		
SSH 3		
SSH 4		
SSH 5		

Electrical & Computer Engineering and Mechanical Engineering
Dual Major (ECE-ME)

MATH and Basic Science	**Semester**	**Notes**
MATH 31		
MATH 32		
MATH 103		
MATH 107		
MATH 108		
ECE 255		
CHEM 21L or 31L		AP credit CHEM 19 is also acceptable
PHYSICS 61L		Matriculating students who have AP credit for PHYSICS 61L (but not 62L) take PHYSICS 62L; those who have AP for PHYSICS 61L & 62L take PHYSICS 63L; and international students who have IPCs for GCE A-level physics take PHYSICS 63L or 143.
PHYSICS 62L		
BIOLOGY 25L *or* 147		AP credit BIOLOGY 19 is also acceptable
Engineering Topics		
ECE 27L		
ECE 51L		
ECE 52L		
ECE 53L		
ECE 54L		
ECE 142		
ECE Concentration Elective		One course selected from the set approved for ECE program.
Approved ECE Design Elective		Course from Approved List (ECE 123, 135, 154, 164, 251, & 261) must be taken in semester in which student has Senior status
EGR 20		
EGR 53L		
EGR 75L		
EGR 119		
EGR 123L		
ME 83L		
ME 101L		
ME 125L		
ME 126L		
ME 131		
ME 141L		
ME 150L		
ME 160L		
ME Technical Elective		Any ME course at 100 level or higher.
COMPSCI 100E or 100		EGR 53L recommended before COMPSCI 100E/100
Other General Education		
WRITING 20		University writing program, required first year
SSH 1		SSH choices must cover 3 of 4 Areas of Knowledge (ALP, CZ, FL, SS), must include at least one SS course and must include at least two courses from a single department (with at least one at the 100 or higher level).
SSH 2		
SSH 3		
SSH 4		
SSH 5		

Electrical & Computer Engineering (ECE)
and Physics (PHYSICS) Dual Major

MATH and Basic Science	**Semester**	**Notes**
MATH 31		
MATH 32		
MATH 103		
MATH 107		
MATH 108		
STA 113		STA 113 is recommended but students may sub MATH 135/ECE 255
CHEM 21L or 31L		AP credit CHEM 19 is also acceptable
PHYSICS 61L		Matriculating students who have AP credit for PHYSICS 61L (but not 62L) take PHYSICS 62L; those who have AP for PHYSICS 61L & 62L take PHYSICS 63L; and international students who have IPCs for GCE A-level physics take PHYSICS 63L or 143.
PHYSICS 62L		
PHYSICS 143L		
PHYSICS 181		
PHYSICS 182		
PHYSICS 211		
PHYSICS 212		
PHYSICS 217		
PHYSICS Elective		Any PHYSICS course at 100 level or above
BIOLOGY 25L *or* 147		AP credit BIOLOGY 19 is also acceptable
Engineering Topics		
ECE 27L		
ECE 51L		
ECE 52L		
ECE 53L		
ECE 54L		
ECE 176		
ECE Elective		Any ECE course at 100 level or above except 148L, which latter course may be taken as a general elective
ECE Concentration Elective 1		Four approved concentration electives, with two different Areas of Concentration represented and at least two courses in one of the elected areas (3+1, 2+2, 2+1+1)
ECE Concentration Elective 2		
ECE Concentration Elective 3		
ECE Concentration Elective 4		
ECE Design Elective		Course from Approved List (ECE 123, 135, 154, 164, 251, & 261) must be taken in semester in which student has Senior status
EGR 53L		Students matriculating prior to 2004 may substitute a free elective
COMPSCI 100E or 100		EGR 53L recommended before COMPSCI 100E/100
Other General Education		
WRITING 20		University writing program, required first year
SSH 1		SSH choices must cover 3 of 4 Areas of Knowledge (ALP, CZ, FL, SS), must include at least one SS course and must include at least two courses from a single department (with at least one at the 100 or higher level).
SSH 2		
SSH 3		
SSH 4		
SSH 5		

Electrical and Compupter Engineering Major (ECE)
with a Minor in Physics (PHYSICS)

MATH and Basic Science	**Semester**	**Notes**
MATH 31		
MATH 32		
MATH 103		
MATH 107		
MATH 108		
STA 113		STA 113 is recommended but students may sub MATH 135/ECE 255
CHEM 21L or 31L		AP credit CHEM 19 is also acceptable
PHYSICS 61L		Matriculating students who have AP credit for PHYSICS 61L (but not 62L) take PHYSICS 62L; those who have AP for PHYSICS 61L & 62L take PHYSICS 63L; and international students who have IPCs for GCE A-level physics take PHYSICS 63L or 143.
PHYSICS 62L		
PHYSICS 143L		Students who take PHYSICS 143L in lieu of 61L & 62L, substitute a second PHYSICS Elective.
PHYSICS Elective		Any PHYSICS course at 100 level or above
BIOLOGY 25L *or* 147		AP credit BIOLOGY 19 is also acceptable
Engineering Topics		
ECE 27L		
ECE 51L		
ECE 52L		
ECE 53L		
ECE 54L		
ECE Elective		Any ECE course at 100 level or above except 148L, which latter course may be taken as a general elective
ECE Elective		
ECE Concentration Elective 1		Four approved concentration electives, with two different Areas of Concentration represented and at least two courses in one of the elected areas (3+1, 2+2, 2+1+1)
ECE Concentration Elective 2		
ECE Concentration Elective 3		
ECE Concentration Elective 4		
ECE Design Elective		Course from Approved List (ECE 123, 135, 154, 164, 251, & 261) must be taken in semester in which student has Senior status
EGR 53L		Students matriculating prior to 2004 may substitute a free elective
COMPSCI 100E *or* 100		EGR 53L recommended before COMPSCI 100E/100
Other General Education		
WRITING 20		University writing program, required first year
SSH 1		SSH choices must cover 3 of 4 Areas of Knowledge (ALP, CZ, FL, SS), must include at least one SS course and must include at least two courses from a single department (with at least one at the 100 or higher level).
SSH 2		
SSH 3		
SSH 4		
SSH 5		
Free Elective		
Free Elective		

Electrical and Computer Engineering Major (ECE)
for Premed Students

Math and Basic Science	**Semester**	**Notes**
MATH 31		
MATH 32		
MATH 103		
MATH 107		
MATH 108		
STA 113		STA 113 is recommended but students may sub MATH 135/ECE 255
CHEM 21L *or* 31L		AP credit CHEM 19 is also acceptable
CHEM 22L *or* 32L		
CHEM 151L		Sophomore or Junior year, or earlier if AP credits for prerequisites.
CHEM 152L		Sophomore or Junior year, or earlier if AP credits for prerequisites.
PHYSICS 61L		Matriculating students who have AP credit for PHYSICS 61L (but not 62L) take PHYSICS 62L; those who have AP for PHYSICS 61L & 62L take PHYSICS 63L; and international students who have IPCs for GCE A-level physics take PHYSICS 63L or 143.
PHYSICS 62L		
BIOLOGY 25L		AP credit BIOLOGY 19 is also acceptable
BIOLOGY Lab Elective		
Engineering Topics		
ECE 27L		
ECE 51L		
ECE 52L		
ECE 53L		
ECE 54L		
ECE Elective		Any ECE course at 100 level or above except 148L, which latter course may be taken as a general elective
ECE Elective		
ECE Concentration Elective 1		Four approved concentration electives, with two different Areas of Concentration represented and at least two courses in one of the elected areas (3+1, 2+2, 2+1+1)
ECE Concentration Elective 2		
ECE Concentration Elective 3		
ECE Concentration Elective 4		
ECE Design Elective		Course from Approved List (ECE 123, 135, 154, 164, 251, & 261) must be taken in semester in which student has Senior status
EGR 53L		Students matriculating prior to 2004 may substitute a free elective
COMPSCI 100E *or* 100		EGR 53L recommended before COMPSCI 100E/100
Other General Education		
WRITING 20		University writing program, required first year
SSH1		SSH choices must cover 3 of 4 Areas of Knowledge (ALP, CZ, FL, SS), must include at least one SS course and must include at least two courses from a single department (with at least one at the 100 or higher level).
SSH2		
SSH3		
SSH4		
SSH5		

Electrical and Computer Engineering Major (ECE)
with a Minor in Statistical Science (STA)

MATH and Basic Science	**Semester**	**Notes**
MATH 31		
MATH 32		
MATH 103		
MATH 107		
MATH 108		
STA 113		STA 113 is recommended but students may sub MATH 135/ECE 255
STA Elective		STA course at the 100 level or above. Students are strongly advised to discuss their choices with the STA DUS.
STA Elective		
STA Elective		
STA Elective		
CHEM 21L *or* 31L		AP credit CHEM 19 is also acceptable
PHYSICS 61L		Matriculating students who have AP credit for PHYSICS 61L (but not 62L) take PHYSICS 62L; those who have AP for PHYSICS 61L & 62L take PHYSICS 63L; and international students who have IPCs for GCE A-level physics take PHYSICS 63L or 143.
PHYSICS 62L		
BIOLOGY 25L *or* 147		AP credit BIOLOGY 19 is also acceptable
Engineering Topics		
ECE 27L		
ECE 51L		
ECE 52L		
ECE 53L		
ECE 54L		
ECE Elective		Any ECE course at 100 level or above except 148L, which latter course may be taken as a general elective
ECE Elective		
ECE Concentration Elective 1		Four approved concentration electives, with two different Areas of Concentration represented and at least two courses in one of the elected areas (3+1, 2+2, 2+1+1)
ECE Concentration Elective 2		
ECE Concentration Elective 3		
ECE Concentration Elective 4		
ECE Design Elective		Course from Approved List (ECE 123, 135, 154, 164, 251, & 261) must be taken in semester in which student has Senior status
EGR 53L		Students matriculating prior to 2004 may substitute a free elective
COMPSCI 100E *or* 100		EGR 53L recommended before COMPSCI 100E/100
Other General Education		
WRITING 20		University writing program, required first year
SSH 1		SSH choices must cover 3 of 4 Areas of Knowledge (ALP, CZ, FL, SS), must include at least one SS course and must include at least two courses from a single department (with at least one at the 100 or higher level).
SSH 2		
SSH 3		
SSH 4		
SSH 5		