Composition (includes ENC 3254) ........................................... 3
Social and Behavioral* .................................................... 3
Humanities* (includes HUM 2305) ....................................... 6-9
International and Diversity** ............................................ 6

* Both categories combined must total 15 hours with no fewer than 6 hours taken in either category (i.e. 6 in one, 9 in other).
**Courses selected will also fulfill the General Education requirement in Social and Behavioral (S) or Humanities (H).
***The Mathematics, Physical Sciences, and Biological Sciences requirements are covered by the departmental requirements below.

DEPARTMENTAL REQUIREMENTS

Mathematics (18)

MAC 2311 Analytic Geometry & Calculus 1 .................................. 4
MAC 2312 Analytic Geometry & Calculus 2 .................................. 4
MAC 2313 Analytic Geometry & Calculus 3 .................................. 4
MAS 3114 Comp. Linear Algebra (Cal 2 & prog. lang.exp.) .................. 3
STA 3032 Engineering Statistics (Cal 1) ..................................... 3

Physics (8)

PHY 2048 Physics w/Cal 1 (HS Physics, Cal 1; Cal 2, PHY2048L) ........ ..3
PHY 2048L Lab for PHY 2048 (PHY 2048) .................................. 1
PHY 2049 Physics w/Cal 2 (PHY 2048; Cal 3, PHY 2049L) ............ .3
PHY 2049L Lab for PHY 2049 (PHY 2049) .................................. 1

Chemistry (4)

CHM 2045 Gen Chemistry (CHM 1025; pass chem. readiness) .......... .3
CHM 2045L Lab for CHM 2045 (CHM 2045) .................................. 1

Communications (6)

ENC 3254 Professional Communications for Engineers .................... 3
Writing or Public Speaking course (from approved list) .................. 3

Interdisciplinary Electives (15) (choose one option)

Option A*: 15 credits applicable to a formal UF minor; completion of minor not required if it exceeds 15 credits, however, it is highly recommended.

Option B: 15 credit hours in courses at 3000-level or above in the same area of study (advisor approval required).

If the minor requires less than 15 credits, the remaining credits can be fulfilled with additional upper-level coursework in the area of the minor or with CISE technical electives.

Computer Science Major Courses (39)

COP 3502 Prog. Fundamentals 1 (MAC 2311) ............................. 3
COP 3503 Prog. Fundamentals 2 (MAC 2311, COP 3502) ............... 3
COT 3100 App. of Discrete Structures (MAC 2311, COP 3503) ........ 3
COP 3530 Data Struct & Algorithms (COP 3503, COT 3100, Cal 2) .................. 4
CDA 3101 Intro to Comp Organization (Cal 1, COP 3503) .................. 3
CEN 3031 Intro to Software Engineering (COP 3530) ..................... 3
COT 4501 Numerical Analysis (COP 3504/03, MAS3114) ................. 3
OR MAD 4401 Int. Num. Anlys. (MAS 3114) *If math minor .......... 3
COP 4600 Operating Systems (COP 3530, CDA 3101) .................... 3
CNT 4007C Comp. Network Fund. (COP 4600) ............................. 4
CIS 4914 Sr. Project or CIS 4913C-IPPD 2 (4EG) ......................... 3
CIS 4301 Info & DB Sys Dsgn & Dev 1(COP 3503, COT 3100) ............ 3
EEL 3701C Digital Logic & Computer Systems (COP 3503) ............ 4

Technical Electives (15**) - 11 hrs must be CISE courses

CAP 4053 AI for Computer Games (COP 3530) ............................. 3
CAP 4410 Digital Image Processing (COP 3530) ............................ 3
CAP 4621 Artificial Intelligence & Heuristics (COP 3530) ................. 3
CAP 4680 Knowledge-Based Syst.: Theory & Pract. (CAP 4621) ........ 3
COP 4730 Comp. Structures in Computer Graphics (COP 3530) ........ 3
COP 4800 Systems Simulation (COP 3530) ................................. 3
CAP 4403 Aesthetic Computing (COP 3530) ................................. 3
CDA 4102 Computer Architecture (CDA 3101, COP 3530) ............... 3
CEN 4012 Software System Development (CEN 3031) ..................... 3
CEN 4072 Software Testing & Verification (CEN 3031) ..................... 3
CIS 4905 Individual Study .................................................. 1
CIS 4912C IPPD 1 (application requ'd) ..................................... 3
COP 4020 Programming Language Concepts (COP 3530) ............... 3
COP 4331 Object-oriented Programming (COP 3530) ..................... 3
COP 4343 UNIX System Administration (COP 4600) ..................... 3
COP 4620 Translators & Translator Writing Sys. (COP 3530) ............ 3
COP 4720 Info & DB System Design & Dev. 2 (CIS 4301, COP 3530) ... 3
CGS 3065 Legal & Social Issues in Computing (F) ......................... 3
EIN 4354 Engineering Economy (Jr. Standing) ............................. 3
CIS 4930 Special Topics (advisor approval) .................................. 3
CIS 4940 Internship (advisor approval) .................................... 1
CIS 4949 Co-op (advisor approval) ......................................... 1

* The above list is not exhaustive, nor are all courses always offered. Electives may be:

1) Any 3000-level or higher CISE, ECE or PHY course not taken to fulfill some other requirement, excluding EEL 3003, EEL 4834, and most CGS courses.
2) MAP 2302 or any 4000-level math or statistics course with the prefix STA, MAA, MAD, MAS or MHF not taken to fulfill any other requirement with the following exceptions:
   - Take only ONE of these: COT 3100, MAD 4203, or MAD 3107.
   - Take only ONE of these: COT 4501 and MAD 4401
   - Take only ONE of these: COT 4420 and MAD 4504

**At most, 3 credits of a programming language course may count towards technical elective credit. See Advisor for approval.

NOTES:

- Students must complete all Critical Tracking (bold) courses with a C or better within two attempts (W counts as an attempt), while maintaining a 2.5 tracking GPA. Must maintain UF and CISE GPA of 2.0.
- ENC 3254, EEL 3701C, and COP 3503 must be completed with a C or better. A grade of C- or lower will not fulfill degree requirements.
- Courses in parenthesis are prerequisites; underlined courses are corequisites.
- An Exit Interview is required during final semester. Please see an academic advisor for details.
- CGS 3065 will count for both the Ethics requirement and 3 hrs of Technical Elective.

*Minimum Total Hours.................................................................121

Rev 2/13 - This document is intended to be used only as a counseling guide. Graduation requirements are more completely specified in the UF Undergraduate Catalog.