

**B.S. in Computer Science Requirements for Students Starting  
Fall 2001 thru Spring 2002**

Student \_\_\_\_\_ ID \_\_\_\_\_ Full-time / Part-time \_\_\_\_\_

**Mathematics**

| Course                                | Hrs. | Semester |
|---------------------------------------|------|----------|
| MATH 151                              | 5    |          |
| MATH 152                              | 5    |          |
| MATH 251                              | 4    |          |
| MATH 474                              | 3    |          |
| MATH                                  |      |          |
| <b>Total hours (20 hours minimum)</b> |      |          |

**Science / Engineering**

| Course                                | Hrs. | Semester |
|---------------------------------------|------|----------|
| PHYS 123                              | 4    |          |
| PHYS 221                              | 4    |          |
|                                       |      |          |
|                                       |      |          |
| <b>Total hours (14 hours minimum)</b> |      |          |

**Humanities**

| Course                                | Hrs. | Semester |
|---------------------------------------|------|----------|
| HUM 100-level (C)                     | 3    |          |
| CS485orPHIL374 (C)                    | 3    |          |
| (C)                                   | 3    |          |
| (C)                                   | 3    |          |
| (C)                                   | 3    |          |
| <b>Total hours (15 hours minimum)</b> |      |          |

At least 6 hours (excluding CS 485) must be at the 300-level or above.

**Social Sciences**

| Course                                | Hrs. | Semester |
|---------------------------------------|------|----------|
| ECON (C)                              | 3    |          |
| (C)                                   | 3    |          |
| (C)                                   | 3    |          |
|                                       | 3    |          |
| <b>Total hours (12 hours minimum)</b> |      |          |

At least 6 hours must be in one field and at least 3 hours in another field. At least 6 hours must be at the 300-level or above.

**Non-technical Elective**

| Course                               | Hrs. | Semester |
|--------------------------------------|------|----------|
|                                      | 3    |          |
| <b>Total hours (3 hours minimum)</b> |      |          |

**Computer Science**

| Course                                | Hrs. | Semester |
|---------------------------------------|------|----------|
| CS 100 (C)                            | 2    |          |
| CS 105                                | 2    |          |
| CS 106                                | 2    |          |
| CS330 or MATH230                      | 3    |          |
| CS 331                                | 3    |          |
| CS 350 (C)                            | 3    |          |
| CS 351                                | 3    |          |
| CS 430 (C)                            | 3    |          |
| CS 440                                | 3    |          |
| CS 450                                | 3    |          |
| CS 487 (C)                            | 3    |          |
| (C)                                   | 3    |          |
|                                       | 3    |          |
|                                       | 3    |          |
|                                       | 3    |          |
|                                       | 3    |          |
| <b>Total hours (45 hours minimum)</b> |      |          |

**Interprofessional Projects**

| Course                               | Hrs. | Semester |
|--------------------------------------|------|----------|
| (C)                                  | 3    |          |
| (C)                                  | 3    |          |
| <b>Total hours (6 hours minimum)</b> |      |          |

**Free Electives**

| Course             | Hrs. | Semester |
|--------------------|------|----------|
|                    | 3    |          |
|                    | 3    |          |
|                    | 3    |          |
|                    | 3    |          |
| <b>Total hours</b> |      |          |

**Minor field** \_\_\_\_\_

A minor is *optional*. If a minor is selected, it must include a minimum of 15 hours. Place an **M** next to the courses used toward the minor.

Communications General Education Requirement - Minimum 42 hours of **C** courses, at least 15 in major courses and at least 15 in non-major courses. Place a **C** next to the courses used for Comm. Gen. Ed. Req.

Total hours (127 hours minimum) \_\_\_\_\_ Hours at the 300-level or above (60 hrs. min.) \_\_\_\_\_

Advisor \_\_\_\_\_ Date \_\_\_\_\_

## Notes on the B.S. in Computer Science for Students Starting **Fall 2001 thru Spring 2002**

**General note:** Courses marked in the IIT Bulletin as not applying to graduation for degrees in "engineering and the physical sciences" may not be used toward the B.S. in Computer Science - this includes their use as free electives.

**Computer science electives:** Any computer science course at the 300-level or higher (including graduate CS courses) except CS401, CS402, CS403 and CS406 may be used as a computer science elective. To fulfill the university Communications General Education requirement, at least one CS elective must be chosen from CS425, CS447, CS460, CS470, CS471, CS495-Info. Retrieval. ECE 218 (Digital Systems) and ECE441 (Microcomputers) may also be used as computer science electives. No courses from any other programs can be used as CS electives (for example, ICOM courses cannot be used as CS electives).

**Mathematics electives:** MATH221 and MATH230 cannot be taken as mathematics electives. Students usually take MATH252 (if they are planning on taking ECE211/212 as science engineering electives) or any 300-level math course or MATH454, MATH471, MATH472

**Science/engineering electives:** Science/engineering electives may be chosen from the natural sciences (biology (without lab ok), chemistry (without lab ok), and physics), psychology (limited to courses marked with an N in the IIT Bulletin), or engineering (architectural, aerospace, chemical, civil, electrical, environmental, mechanical, and metallurgical). At least one course must be in a field other than physics. Note that ECE 218 (Digital Systems) and ECE441 (Microcomputers) may not be used to satisfy this requirement.

**Humanities electives:** (English, History, Philosophy) Humanities course work (courses marked with an H in the IIT Bulletin) must include at least 6 hours at the 300-level or above (excluding CS 485). Note that foreign language courses at the 200-level may be used to satisfy the 300-level requirement. This substitution requires written approval from the student's faculty advisor. In Fall 2001, almost all courses which have been heretofore designated as English (ENGL in the catalog) are now going to be designated EITHER as Literature (LIT) or as Communication (COM) courses. All LIT and some COM courses carry the (H); and all LIT and all COM courses carry the (C).

**Social sciences electives:** (Economics, Political Science, Sociology, Psychology) Social sciences course work (courses marked with an S in the IIT Bulletin) must include at least 3 hours of economics. At least 6 hours of social sciences course work must be taken in one field and at least 3 hours in another field. At least 6 hours must be taken at the 300-level or above.

**Non-technical elective:** The non-technical elective must be taken in a field other than computer science, mathematics, the natural sciences, or engineering.

**IPROs:** We urge students to take at least one non-CS specific IPRO. One of the two required Inter-Professional Projects may be replaced for ROTC students (replaced with ROTC junior and senior required courses). Both of the two required Inter-Professional Projects might be replaced for full-time working students who can document interdisciplinary project work (replaced with CS elective and free elective). Co-Op cannot be used. A petition must be filed through the Undergraduate Dean.

**Minor:** (Optional) A minor may be chosen from the specialized minors listed in the IIT Bulletin or may be formed from 15 hours of course work in one department. The latter option requires written approval from both the student's faculty advisor and the minor department.

**ROTC programs:** ROTC programs are considered to be minors and satisfy the requirements for minors listed above.

**Graduate and short courses:** Undergraduates may enroll in a 500-level graduate course with permission from the student's faculty advisor. Undergraduates cannot enroll in short courses.

**Communications General Education Requirement:** Minimum 42 hours of "C" courses as marked in IIT Bulletin of Undergraduate Programs, at least 15 hours in major courses (chosen from CS100, CS350, CS425, CS430, CS447, CS460, CS470, CS471, CS485, CS487, CS495-Info. Retrieval) and at least 15 hours in non-major courses. Almost all Humanities and Social Science electives will count towards the communications requirement.

**B.S. in Computer Science Sample Curriculum by Semester for Students Starting  
Fall 2001 thru Spring 2002**

| <b>First semester</b> |    | <b>Second semester</b> |    | <b>Third semester</b>   |    | <b>Fourth semester</b>    |            |
|-----------------------|----|------------------------|----|-------------------------|----|---------------------------|------------|
| CS 100                | 2  | CS 106                 | 2  | CS 330 or MATH230       | 3  | CS 350                    | 3          |
| CS 105                | 2  | MATH 152               | 5  | CS 331                  | 3  | CS 430                    | 3          |
| MATH 151              | 5  | PHYS 123               | 4  | MATH 251                | 4  | Math elective             | 3          |
| HUM 100-level         | 3  | Humanities elective    | 3  | PHYS 221                | 4  | Science/eng. elective     | 3          |
| Social sci. elective  | 3  | Social sci. elective   | 3  | Humanities elective     | 3  | Social sci. elective      | 3          |
|                       | 15 |                        | 17 |                         | 17 |                           | 15         |
|                       |    |                        |    |                         |    |                           |            |
| <b>Fifth semester</b> |    | <b>Sixth semester</b>  |    | <b>Seventh semester</b> |    | <b>Eighth semester</b>    |            |
| CS 351                | 3  | CS 440                 | 3  | I PRO II                | 3  | CS elective               | 3          |
| CS elective           | 3  | CS elective            | 3  | CS 450                  | 3  | CS elective               | 3          |
| Science/eng. elective | 3  | MATH 474               | 3  | CS 487                  | 3  | PHIL 374 or CS 485        | 3          |
| Humanities elective   | 3  | I PRO I                | 3  | CS elective             | 3  | Non-tech. elective        | 3          |
| Free elective         | 3  | Free elective          | 3  | Social sci. elective    | 3  | Free elective             | 3          |
|                       | 15 |                        | 15 | Free elective           | 3  |                           | 15         |
|                       |    |                        |    |                         | 18 |                           |            |
|                       |    |                        |    |                         |    | <b>Total credit hours</b> | <b>127</b> |