### B.S. in COMPUTER ENGINEERING (2018-2019 Catalog)

**Advisor:\_\_\_\_\_\_\_\_\_**

**\_\_Fast Track \_\_Minor\_\_\_\_\_\_\_\_\_**

**\_\_Dbl Major/Degree**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Other:**

### Student \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ UTD ID \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# MAJOR PREPARATORY REQUIREMENTS

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **LD** | **UD** | **NTS** | **COURSE TITLE** | **COURSE #** | **GRADE** | **SEM** | **INFO** |
| 1 |  | 1,8 | Introduction to Engineering and CS | ECS 1100 |  |  |  |
| 1 |  | 1 | Introduction to Computer Engineering | CE 1100 |  |  |  |
| 2 |  | 1 | Introduction to Electrical Engineering II | CE 1202 |  |  |  |
| 3 |  | 2 | Computer Science I | CE 1337 |  |  |  |
| 3 |  | 2 | Computer Science II | CE 2336 |  |  |  |
| 3 |  | 1 | Introduction to Digital Systems | CE 2310 |  |  |  |
| 3 |  | 2 | Discrete Mathematics for Computing I | CE 2305 |  |  |  |
| 3 |  | 1 | Linear Algebra for Engineers | ENGR 2300 |  |  |  |
| 4 |  | 1,3,4 | Calculus I | MATH 2414 or 2417 |  |  |  |
| 4 |  | 1,3,4 | Calculus II | MATH 2415 or 2419 |  |  |  |
| 4 |  | 1 | Differential Equations w/ Applications | MATH 2420 |  |  |  |
| 3 |  | 1,3 | Mechanics | PHYS 2325 |  |  |  |
| 1 |  | 1,3 | Physics Laboratory I | PHYS 2125 |  |  |  |
| 3 |  | 1,3 | Electromagnetism and Waves | PHYS 2326 |  |  |  |
| 1 |  | 1 | Physics Laboratory II | PHYS 2126 |  |  |  |
| 39 |  |

MAJOR CORE REQUIREMENTS\* *(\*Courses in this block used to calculate major GPA)*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | 3 | 1 | Advanced Engineering Math | ENGR 3300\* |  |  |  |
|  | 3 | 1 | Electrical Network Analysis | CE 3301\* |  |  |  |
|  | 1 | 1 | Electrical Network Analysis Lab | CE 3101\* |  |  |  |
|  | 3 | 1 | Signals and Systems | CE 3302\* |  |  |  |
|  | 1 | 1 | Signals and Systems Lab | CE 3102\* |  |  |  |
|  | 3 | 1 | Electronic Devices | CE 3310\* |  |  |  |
|  | 1 | 1 | Electronic Devices Lab | CE 3110\* |  |  |  |
|  | 3 | 1 | Electronic Circuits | CE 3311\* |  |  |  |
|  | 1 | 1 | Electronic Circuits Lab | CE 3111\* |  |  |  |
|  | 3 | 1 | Digital Circuits | CE 3320\* |  |  |  |
|  | 1 | 1 | Digital Circuits Lab | CE 3120\* |  |  |  |
|  | 3 | 1 | Probability Theory & Statistics | ENGR 3341\* |  |  |  |
|  | 3 | 1 | Data Structures & Intro to Algorithmic Analysis | CE 3345\* |  |  |  |
|  | 3 | 1 | Software Engineering | CE 3354\* |  |  |  |
|  | 3 | 1 | Computer Architecture | CE 4304\* |  |  |  |
|  | 3 | 1 | Organization of Programming Languages | CE 4337\* |  |  |  |
|  | 3 | 1 | Operating Systems Concepts | CE 4348\* |  |  |  |
|  | 3 | 1 | Embedded Microprocessor Systems | CE 4370\* |  |  |  |
|  | 3 | 1 | Computer Networks | CE 4390\* |  |  |  |
|  | 3 | 1 | Senior Design Project I | CE 4388\* |  |  |  |
|  | 3 | 1 | Senior Design Project II | CE 4389\* |  |  |  |
|  | 3 | 1,3 | Social Issues and Ethics in CS & E | ECS 3361\* |  |  |  |
|  | 3 | 1,3 | Professional & Technical Communication | ECS 3390\* |  |  |  |
|  | 59 |

REMAINING CORE CURRICULUM

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 3 |  | 1 | Rhetoric | RHET 1302 |  |  |  |
| 3 |  |  | American National Government | GOVT 2305 |  |  |  |
| 3 |  |  | State and Local Government | GOVT 2306 |  |  |  |
| 3 |  | 5 | US History Survey to Civil War (Core: 060) | HIST 1301 |  |  |  |
| 3 |  | 5 | US History Survey from Civil War (Core: 060) | HIST 1302 |  |  |  |
| 3 |  | 5 | Exploration of the Humanities (Core: 040) | HUMA 1301 |  |  |  |
| 3 |  | 5 | Exploration of the Arts (Core: 050) | ARTS 1301 |  |  |  |
| 21 |  |

ELECTIVES (7 Hours - Requires Approval from Advisor)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 3 |  | 6,7 | Free Elective | |  |  |  |  | |
| 3 |  | 6,7 | Free Elective | |  |  |  |  | |
| 1 |  | 6,7 | Free Elective | |  |  |  |  | |
| 0 |  | 8 | Freshmen Seminar | | UNIV 1010 |  |  |  | |
| 0 |  | 9 | Core Curriculum Assessment | | UNIV 2020 |  |  |  | |
| 7 |  |
| 67 | 59 | ***Total Hours\_\_\_\_\_\_\_\_\_*** | | ***126 hours required for graduation. Must include minimum 51 hours as Upper Division.\*\*\**** | | | | |

## NOTES

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| --- | --- |
| 1. Major requirement. Must earn C- or better to receive credit. | 2. CS Requirement: Must earn a C or better to receive credit. |
| 3. Course meets both Major and CORE requirement. | 4. Must take Math 2413/2414/2415 ***or*** Math 2417/2419. |
| 5. Other course options available. See advisor for details. | 6. A maximum of 3 PHIN credits is allowed on any UTD degree plan. |
| 7. Lower or upper division courses may count as free electives. |  |
| 8. Incoming freshmen (FTIC) must enroll and complete requirements of UNIV 1010 and the corresponding school-related freshmen seminar course. | |
| 9. All students, including transfer students, who complete their core curriculum at UT Dallas must take UNIV 2020. | |
| \*\*\* Must have a minimum cumulative 2.0 GPA in all UTD coursework and a cumulative 2.0 GPA in all Major requirements to graduate. Students must also complete 45 hours in residence and complete 24 of the last 30 hours at UTD. No off-campus coursework in the last semester allowed. | |