**Computational Science MS Degree Plan (Thesis Option: 31 Credits)**



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| **Student Name:**  | **Email and Cell Phone:**  |
| **UTEP ID:**  | **Office Location and Phone:**  |
| **Undergraduate Major:**  | **Student Type:** Full-time / Part-time |
| **Previous Graduate Study Area:**  | **Start Date:**  |
| **CPS Research Advisor(s):**  | **Expected Graduation Date:**  |
| **CPS Graduate Advisor:** Dr. Ming-Ying Leungmleung@utep.edu; 915.747.6836 | **GRE Scores:** Verbal ( ); Quantitative ( ); Analytical Writing ( ) |
| **For Course Registration:** Computational Science Officecomputationalscience@utep.edu; 915.747.8484 | **TOEFL/IELTS Scores (if applicable):**  |

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| **Core Courses (13 credits; \*first 2 courses may be taken concurrently)**  | **Semester** | **Grade** |
| MATH 5329 – Numerical Analysis\* |  |  |
| CPS 5401 – Introduction to Computational Science\* |  |  |
| CPS 5310 – Mathematical and Computer Modeling (prerequisite: CPS 5401) |  |  |
| CPS 5320 – Advanced Scientific Computing (prerequisite: CPS 5310) |  |  |
| **Prescribed Electives (6 credits; choose 2 from the following list)****CS:** CS 5334 and CS 5350; **MATH:** MATH 5330, MATH 5343, and MATH 5345 **STAT:** STAT 5329 and STAT 5385 |  |  |
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| 2.  |  |  |
| **Free Electives (Choose ONE from the following areas)*** Computer Science (CS courses)
* Mathematics and Statistics (MATH or STAT courses)
* Science and Engineering (STEM courses other than CS, MATH, and STAT)

**Extra courses taken in the list of Prescribed Electives can be used as Free Electives.** | **Semester** | **Grade** |
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| **Graduate Research (3 credits)** |  |  |
| CPS 5397 – Graduate Research |  |  |

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| **Graduate Thesis (6 credits)** | **Semester** | **Grade** |
| 1. CPS 5398 – Graduate Thesis |  |  |
| 2. CPS 5399 – Graduate Thesis (taken after CPS 5398 each semester until graduation) |  |  |
| **Graduate Seminars (Each student is required to enroll in CPS 5195 with one credit-hour once during each academic year up to a total of 2 semesters. This seminar class does not count toward the degree requirement.)** | **Semester** | **Grade** |
| 1. CPS 5195 – Graduate Seminar |  |  |
| 2. CPS 5195 – Graduate Seminar |  |  |
| **Leveling Courses and Prerequisites (To be completed in Year 1)** |  |  |
| CS 1320 Computer Programming Sci/Engr. (or equivalent: CS 1301 + CS 1101) |  |  |
| MATH 2313 – Calculus III |  |  |
| MATH 3323 – Matrix Algebra (MATH 1312 as prereq in , Grade: ) |  |  |
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**NOTES:**