*College of Graduate Studies*

##### 5BDegree Plan for Ph.D in Computational Science

### 0B

### Part I – Student Information

Name: MTSU ID # U M

Current Mailing Address:

City, State, Zip: MTSU Email Address:

Degree Sought: Major:

*If applicable:*

Concentration: Specialization: Minor:

I understand that if human or animal subjects are involved in my research (including dissertation research), it is my responsibility to file a research protocol application with the Institutional Review Board (Sam H. Ingram Building, 011B) before I begin collecting data. Failure to secure this permission prior to conducting my data collection using human or animal subjects will negate the use of that data for any academic purpose including dissertation.

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|  |  |  |
| *Signature of Student* |  | *Date* |

### 1B

### Part II – Signatures and Approvals

#### 3B**Signatures in this area are required for approval of all degree plans.**

I certify that the following program, when successfully completed, meets all coursework requirements for this degree.

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| --- | --- | --- | --- | --- |
|  |  |  |  |  |
| *Graduate Advisor Name (Print)* |  | *Signature* |  | *Date* |

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|  |  |  |
| *College of Graduate Studies Approval* |  | *Date* |

*Signatures in this area are required for approval only if applicable to degree program.*

This individual holds a professional license, or licensure requirements will be met by the courses listed below.

|  |  |  |  |  |
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|  |  |  |  |  |
| *Teacher Licensure Office Approval (Print)* |  | *Signature* |  | *Date* |

Programs that require educational component

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
| *Chair of Educational Leadership/Elementary Education (Print)* |  | *Signature* |  | *Date* |

Minor Advisor

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
| *Graduate Minor Advisor (Print)* |  | *Signature* |  | *Date* |

Name: MTSU ID # U M

### 2BPart III – Course Information

List ONLY graduate-level courses to be counted toward the degree. Include those completed as well as those still to be taken to fulfill degree requirements.

All Ph.D. candidates must complete 72 hours in the following course of study:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  | Transfer Credit | |
| Course ID | Course Title | Cr Hrs | Grade | Course ID | Institution |
| Foundation Courses (11 Hours) | | | | | |
| CSCI 6050 | Computer Systems Fundamentals | 4 |  |  |  |
| COMS 6100 | Fundamentals of Computational Science | 3 |  |  |  |
| COMS 6500 | Fundamentals of Scientific Computing | 4 |  |  |  |
| Computational Science Core (25-27 Hours) | | | | | |
| CSCI 6330 | Parallel Processing Concepts | 3 |  |  |  |
| COMS 7700 | Advanced Topics in Computational Science | 3 |  |  |  |
| COMS 7800 | Teaching Internship | 3 |  |  |  |
| COMS 7840 | Selected Topics in Natural and Applied Sciences | 3 |  |  |  |
| COMS 7900 | Computational Science Capstone | 4 |  |  |  |
| COMS 7950 | Research Seminar in Computational Science | 2 |  |  |  |
| *Simulation Track* | | | | | |
| COMS 7100 | Applied Computational Science | 4 |  |  |  |
| COMS 7300 | Numerical Partial Differential Equations | 4 |  |  |  |
| OR | | | | | |
| *Data Science Track* | | | | | |
| CSCI 7350 | Data Mining | 3 |  |  |  |
| STAT 7400 | Computational Statistics | 3 |  |  |  |
| Advisor Guided Electives (10-12 Hours) | | | | | |
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| Directed Research (12 Hours) | | | | | |
| COMS 7500 | Directed Research in Computational Science |  |  |  |  |
|  |  |  |  |  |  |
| Dissertation (12 Hours) | | | | | |
| COMS 7640 | Dissertation Research |  |  |  |  |
|  |  |  |  |  |  |

*Department must verify that all admission conditions(s) were or were not met:*

Department Admissions Conditions Met? Yes No