



Doctor of Philosophy Plan of Study Engineering and Applied Science

Student ID Number _____ Date Entered Program _____

Student Name: _____
(last) (first) (middle)

Address (home): _____

City _____ State _____ Zip _____

Phone: (____) _____ Email _____ Research Advisor: _____

Curriculum Option: **Machine Learning and Data Science (MLDS)**

Required 36 credits (minimum amount) coursework including 12 credits of core courses in the option and 12 credits at the 600-level or above. 24 credits of Advanced Standing and/or 6 transfer credits are allowed. (Attach UMassD approval forms.)

Required 12 credits of core courses in the option (ie Graduate Major Elective Courses)

Course No.	Course title	Institution	Term/Year	Reqd/Elective	Grade	Credit/Hours

Required 6 credits of minor area courses (ie Graduate Minor Elective Courses)

Course No.	Course title	Institution	Term/Year	Reqd/Elective	Grade	Credit/Hours

Required 9 credits of mathematics and computational courses

Course No.	Course title	Institution	Term/Year	Reqd/Elective	Grade	Credit/Hours
EAS 501	Advanced Mathematical Methods			R		3
EAS 502	Computational Methods			R		3
EAS 520	High Performance Scientific Computing			R		3

Required enrollments in EAS graduate seminar courses (full-time Ph.D. students only)

Course No.	Course title	Institution	Term/Year	Reqd/Elective	Grade	Credit/Hours
EAS 602	Research Ethics	UMassD		R		1
EAS 700	Doctoral Seminar	UMassD		R		2

Required 6 credits in Machine Learning and Data Science courses

Course No.	Course title	Institution	Term/Year	Reqd/Elective	Grade	Credit/Hours
MTH 601 or MTH 602	Mathematics of Deep Learning or Scientific Machine Learning	UMassD		R		3
CIS 530 or CIS 550	Advanced Data Mining or Advanced Machine Learning	UMassD		R		3

Required 3 credits in Dissertation Proposal Preparation

Course No.	Course title	Institution	Term/Year	Reqd/Elective	Grade	Credit/Hours
EAS 600	Dissertation Proposal Preparation	UMassD		R		3

Required 27 credits for doctoral research

Course No.	Course title	Institution	Term/Year	Reqd/Elective	Grade	Credit/Hours
EAS 601	Doctoral Dissertation Research	UMassD		R		
EAS 701	Doctoral Dissertation Research	UMassD		R		

Total number of credits for this degree expected by graduation (66 min.): _____
 (Graduate Course hours plus Research and Dissertation hours)

Examinations for Ph.D. Degree:

Date	Examination	Committee Chair	Result
	<i>Qualifying Examination</i>		Pass Fail
	<i>Comprehensive Examination</i>		Pass Fail
	<i>Dissertation Defense</i>		Pass Fail

Tentative Dissertation Title _____

Approvals	Signature	Date
<i>Student</i>		
<i>Advisor</i>		
<i>Graduate Program Director</i>		
<i>College Dean</i>		
<i>Graduate Studies Office</i>		

Instructions: The "Plan of Study" consists of the list of courses to be completed by the student in partial fulfillment of the Ph.D. degree requirements. This form should be completed by the student and approved

by the student's research/academic advisor within the first year after entering the PhD program. The advisor should forward the completed form to *EAS Program Assistant or Program Director* who will coordinate the remaining approvals. A copy of this form will be kept on file and can be updated at any time.