Master of Science (M.S.) Coursework-only Program
Electrical and Computer Engineering Department

Embedded Systems Track

All master's students must complete a tentative degree plan, which is approved by the adviser, no later than the second quarter of residence at PSU. NOTE: all changes must be initialed and dated by both the student and the adviser. All Pre-admission and Transfer credits MUST be approved by both the ECE Department and the Graduate School. Use the columns on the right to indicate approved (P) Pre-admission (taken at PSU before formal admission) and (T) Transfer credits (taken at another institution). Master's students may apply no more than three credits of ECE 507 Graduate Seminar toward degree elective requirements. Courses with a grade of C+ or lower can be used toward elective requirements only, and only with advisor approval.

	TERM	GRADE	Credits	P	T
Core – 16 credits required					
ECE 540 System on a Chip Design with FPGAs					
ECE 544 Embedded System Design with FPGAs					
ECE 558 Embedded Systems Programming					
ECE 584 Foundations of Cyber-Physical Systems					
Depth and Breadth Course list - 16 credits required					
ECE 525 Digital Integrated Circuit Design I					
ECE 545 Power Electronics Systems Design I					
ECE 551 Control Systems Design I					
ECE 552 Control Systems Design II					
ECE 571 Introduction to System Verilog					
ECE 578 Robotics I					
ECE 579 Robotics II					
ECE 581 ASIC Modeling and Synthesis					
ECE 582 Formal Verification of HW/SW Systems					
ECE 583 Low Power Digital IC Design					
ECE 585 Microprocessor System Design					
ECE 586 Computer Architecture					
ECE 587 Advanced Computer Architecture I					
ECE 588 Advanced Computer Architecture II					
EE 516 Mathematical Foundations of Machine Learning					
EE 519 Deep Learning Theory and Practice					
One additional ECE lecture class – 4 credits required					
Write in course number and name					
ECE					
Electives – 9 credits required					
Write in subject, course number and name					
		TOTAL CREDITS:			

Notes: _____

Email: _____ ID#: _____

Student Name: _____ Signature: _____
(Last) (First)

Adviser: _____ Signature: _____
(Last) (First)

ECE Graduate Director Signature: _____ Date: _____