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

**Signal Processing and Machine Learning 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 Office of Graduate Studies. 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.

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**Core – 16 credits required**

- EE 520 Random Processes
- EE 521 Mathematical Foundations of Machine Learning
- EE 522 Discrete-Time Signal Processing
- EE 523 Estimation & Detection

**Depth and Breadth Course list - 16 credits required**

- EE 519 Deep Learning Theory & Practice
- EE 524 Machine Learning Theory & Algorithms
- EE 525 SSP I: Spectral Estimation
- EE 526 SSP II: Linear Estimation & Adaptive Filters
- EE 527 Sensor Array Processing
- EE 528 State Space Tracking
- EE 529 Signal Processing Practicum

**One additional ECE lecture class – 4 credits required**

Write in course number and name

**Electives – 9 credits required - Recommendation: STAT 671-3 Statistical Learning I-III**

Write in subject, course number and name

**TOTAL CREDITS:**

Notes: ______________________________________________________________________________________________________________

Email: ___________________________ ID#: ___________________________

Student Name: ___________________________ Signature: ___________________________

(Last) __________ (First) __________

Adviser: ___________________________ Signature: ___________________________

(Last) __________ (First) __________

ECE Graduate Coordinator Signature: ___________________________ Date: ___________________________

Updated 7/17/2019