

M.S. / Ph.D. Degree Planner: Machine Learning & Data Science (EC93) – 2018-2019

Core Coursework (16 Units)

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| ECE 143 | Programming for Data Analysis |
| ECE 269 | Linear Algebra |
| ECE 271A | Statistical Learning I |
| ECE 225A | Probability of Statistics for Data Science |

| Quarter / Core Course | |
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| | ECE 143 |
| | ECE 269 |
| | ECE 271A |
| | ECE 225A |
| Total: 16 units | |

16 additional units (with at least 1 course in each area) selected from the following:

| Analytics | |
|--------------|---|
| ECE 271B | Statistical Learning II |
| ECE 273 | Convex Optimization and Applications |
| ECE 275A | Parameter Estimation |
| Computation | |
| ECE 226 | Optimization and Acceleration of Deep Learning on Hardware Platforms |
| ECE 289 | Special Topics - Parallel Processing in Data Sci. |
| ECE 289 | Special Topics - Scalable Learning |
| Applications | |
| ECE 208 | Computational Evolutionary Biology |
| ECE 209 | Statistical Learning for Biosignal Processing |
| ECE 227 | Big Network Data |
| ECE 228 | Machine Learning: Physical Applications Security |
| ECE 268 | Hardware Embedded Systems |
| ECE 271C | Deep Learning Applications |
| ECE 276A-B-C | Robotics: Sensing & Estimation, Planning & Learning, Reinforcement Learning |

| Quarter / Additional Units | |
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| Total: 16 units | |

Technical Electives (16 units)

- Any 4 unit, 200+ course from ECE, CSE, MAE, BENG, CENG, NANO, SE, MATS, MATH, PHYS or COGS taken for a letter grade may be counted. In particular, the following courses are recommended: MATH 245 A-B-C (Convex Analysis and Optimizations), MATH 282 A-B (Applied Statistics), MATH 289C (Exploratory Data Analysis and Inferences), COGS 260 (Image Recognition), and COGS 289 (Machine Learning and Signal Processing for EEG-based Brain Computer Interfaces).
- Up to 12 units of undergraduate ECE coursework (ECE 111+ only; and not including ECE 195, 197, 198 or 199) may be counted.
- MS students (Plan II) are allowed no more than 4 units of ECE 299 (research units) as technical electives. PhD and MS students (Plan I) are allowed no more than 8 units of ECE 299 as technical electives.

| Quarter / Tech. Electives | |
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| Total: 16 units | |

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| Curriculum Advisor: Michael Yip | |
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Advisor's Signature _____ Date _____

Print Student Name (First, Last) _____ UCSD Email _____ PID _____