

**ARTIFICIAL INTELLIGENCE CERTIFICATE PROGRAM
ADVISING SHEET (MINIMUM 12 CREDITS)**

Name: _____ Z Number: _____

FAU Start Date: _____ E-mail: _____ Phone: _____

Are you pursuing a degree program? YES NO Program name: _____

Students will select one of the two tracks: the Development track and the Applications track. The *Development track* is intended for students proficient in programming who will develop new algorithms and mechanisms in artificial intelligence. The *Applications track* is open to students who have introductory programming skills and are interested in learning how to use the tools and algorithms of artificial intelligence. Each track requires four courses that have not been counted in any other minor or certificate program within the College of Engineering and Computer Science.

Students in both tracks are expected to have completed a statistics course before pursuing this certificate. Students must satisfy the prerequisites required for each course in the certificate program. The average GPA of all four courses counted in the program must be 3.0 or better.

Development Track (12 credits)

Required Core Courses (6 credits)- Choose two courses from the following

| Course | Title | Credits | Semester | Grade |
|----------|--|---------|----------|-------|
| CAP 5625 | Computational Foundations of Artificial Intelligence | 3 | | |
| CAP 6635 | Artificial Intelligence | 3 | | |
| CAP 6673 | Data Mining and Machine Learning | 3 | | |

Elective Courses (6 credits) Select two courses from the Elective Table.

Applications Track (12 credits)

Note: This track is NOT open to graduate students in the EECS department, except for MS-EGIT majors.

Core Course (6 credits) : Choose two courses from the following

| Course | Title | Credits | Semester | Grade |
|----------|--|---------|----------|-------|
| CAP 5625 | Computational Foundations of Artificial Intelligence | 3 | | |
| CAP 6610 | Applied Machine Learning | 3 | | |
| CAP 6673 | Data Mining and Machine Learning | 3 | | |

Elective Courses - Select two courses from the Elective Table

Elective Table(6 credits):

Select two courses from the list below. Additional courses may be used as electives with prior written approval of the advisor.

| Courses | Title | Credits | Semester | Grade |
|-----------|--|---------|----------|-------|
| CAP 5615 | Introduction to Neural Networks | 3 | | |
| CAP 5768 | Introduction to Data Science | 3 | | |
| CAP 6546 | Data Mining for Bioinformatics | 3 | | |
| CAP 6617 | Sparse Learning | 3 | | |
| CAP 6618 | Machine Learning for Computer Vision | 3 | | |
| CAP 6619 | Deep Learning | 3 | | |
| CAP 6629 | Reinforcement Learning | 3 | | |
| CAP 6640 | Natural Language Processing | 3 | | |
| CAP 6683 | Artificial Intelligence in Medicine and Healthcare | 3 | | |
| CAP 6778 | Advanced Data Mining and Machine Learning | 3 | | |
| CEN 6405 | Computer Performance Modeling | 3 | | |
| EEL 5661 | Robotic Applications | 3 | | |
| EIN 5603C | Industrial Automation | 3 | | |
| EOC 6663 | Intelligent Underwater Vehicles | 3 | | |
| CGN 5716 | Design and Analysis for Engineering Data | 3 | | |
| TTE 6272 | Intelligent Transportation Systems | 3 | | |

Course Substitution Section: Requires advisor's written approval.

| Course | Title | Credits | Semester | Grade |
|--------|-------|---------|----------|-------|
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Advisor Name: _____ Date: _____