

MS-AAI Program Preparedness and Resources

It's clear that artificial intelligence continues to grow ever more explosively into the future. Through the University of San Diego's MS in Applied Artificial Intelligence (AAI) program, you will be empowered to apply cutting-edge knowledge and technical skills to contribute to AI's advancement. From machine learning, natural language processing, AI agents, MLOps, to computer vision and more, USD's AAI courses take your learning to the next level. Learn about the latest real-world AI applications, along with the ethical considerations, moral responsibilities, and positive societal impact of these technologies. Upon concluding your courses–including a final capstone project–you'll be fully prepared to make an immediate impact in AI.

In preparation for your program start in the MS-AAI degree, all students are encouraged to review the following resources:

Installation/Getting Started Resources

- Self-Assessment Test (Answer Key)
- Python (Anaconda) Installation and Navigating the Jupyter Ecosystem

Programming and Software Resources

- ➤ IBM: Python Basics for Data Science
- Coursera: Python 3 Programming Specialization
- Dive into Python 3
- Python Standard Library
- Python Data Science Handbook

Technical Resources and Requirements

- USD's Information Technology Services Hardware Recommendations
- Windows Operating System 16 GB, 1.5 GHz Speed I7 + 500 GB external memory (preferably SSD hard disk drive). <u>How-to-Check Guide Here</u>.
- Microsoft Office is required (free with your USD account!)

Additional Academic Resources

- Practical Statistics for Data Scientists
- Khan Academy: Calculus
- Khan Academy: Statistics
- Khan Academy: Linear Algebra

- Python (An Introduction to Jupyter and Python)
- Python & Jupyter Notebook Installation
 Instructions
- LearnPython.org: Free Interactive Python Tutorial
- DataCamp.com: Free Interactive Intro to Python
- Slack Pro Channel (\$20/semester); includes Al Teaching Assistant
- Git/GitHub (free account available!)
- Speakers or headset to listen and record multimedia.
- ➤ Webcam for recording video.
- High-speed internet connection required (DSL or better).
- Browser Plug-ins Windows Media Player, QuickTime, Adobe Reader, and Java.
- Math is Fun: Statistics
- Calculus eTextbook by Gilbert Strang
- Paid Tutoring: <u>Wyzant.com external tutoring</u> resources available per hour