

NUS School of Computing

Master of Computing in Artificial Intelligence

(Applies to August 2025 Intake onwards)

Important Note:

1. Courses in this list may be subject to change as decided by the Departments.
2. Please refer to the course code, as course titles, descriptions, and schedules are subject to change without prior notice.
3. Please note that not all courses are offered every semester. Students are advised to refer to the course schedule and plan their studies accordingly.
4. Students are expected to select courses that meet the graduation requirements of the programme. In particular, students should pay special attention to the essential courses from the sub-areas to ensure they select the required number of courses from the required number of sub-areas.
5. Students should review the details on the programme [website](#) to confirm that their course selections align with all programme requirements, including electives and course levels.

Preclusions:

Please note that the following courses are **precluded** from each other:

Course	Precluded Course
CS5477 3D Computer Vision	CS4277 3D Computer Vision
CS5478 Intelligent Robots: Algorithms and Systems	CS4278 Intelligent Robots: Algorithms and Systems
CS5446 Reinforcement Learning and Sequential Decision Making	CS4246 Reinforcement Learning and Sequential Decision Making
CS5246 Text Mining	CS4248 Natural Language Processing
CS5562 Trustworthy Machine Learning	CS6283 Topics in Computer Science: Trustworthy Machine Learning
IS5010 AI Ethics and Governance	IS4246 Smart Systems and AI Governance

Sub-Area 1: Perception

- CS4243 Computer Vision and Pattern Recognition
- **CS5246** Text Mining
- **CS5477** 3D Computer Vision
- CS6207 Advanced Natural Language Processing

Sub-Area 2: Reasoning and Planning

- CS4263 Artificial Intelligence Principles*
- **CS5446** Reinforcement Learning and Sequential Decision Making
- **CS5478** Intelligent Robots: Algorithms and Systems
- CS6244 Advanced Topics in Robotics

Sub-Area 3: Learning and Optimization

- CS5228 Knowledge Discovery and Data Mining⁺
- CS5242 Neural Networks and Deep Learning⁺
- CS5260 Neural Networks and Deep Learning II
- CS5339 Theory and Algorithms for Machine Learning
- CS5340 Uncertainty Modelling in AI
- IS5152 Data-Driven Decision Making⁺

Sub-Area 4: AI Governance

- **CS5562** Trustworthy Machine Learning
- **IS5010** AI Ethics and Governance

**Students who have not done an undergraduate AI course are advised to do CS4263 concurrently or before doing other courses in Sub-Area 2.*

**Students who have not done an undergraduate machine learning course are advised to do CS5228, CS5242, or IS5152 concurrently, or before doing other courses in Sub-Area 1 or Sub-Area 3.*