# NUS School of Computing Master of Computing - Artificial Intelligence Specialisation (with effect from January 2020)

### \*Important Note:

- Courses in this list may be subject to change as decided by the Departments.
- Courses that are in both the AI Core and AI Elective lists can be **counted** <u>either</u> as part of the Core <u>or</u> Elective requirement, but not both.

## **Preclusion:**

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

CS5461 Algorithmic Mechanism Design	CS4261 Algorithmic Mechanism Design
CS5469 Fundamentals of Logic in Computer	CS4269 Fundamentals of Logic in Computer
Science	Science
CS5477 3D Computer Vision	CS4277 3D Computer Vision
CS5478 Intelligent Robots: Algorithms and	CS4278 Intelligent Robots: Algorithms and
Systems	Systems
CS5446 AI Planning and Decision Making	CS4246 AI Planning and Decision Making

# **AI Specialisation Core Courses List**

- CS5446 AI Planning and Decision Making
- CS5340 Uncertainty Modelling in AI
- Choose **ONE**:
  - CS5339 Theory and Algorithms for Machine Learning, OR
  - CS5242 Neural Networks and Deep Learning, OR
  - > IS5152 Data-Driven Decision Making

# **AI Specialisation Elective Courses List**

- CS5339 Theory and Algorithms for Machine Learning
- CS5242 Neural Networks and Deep Learning
- IS5152 Data-Driven Decision Making
- CS4243 Computer Vision and Pattern Recognition
- CS4244 Knowledge Representation and Reasoning
- CS4248 Natural Language Processing
- CS5215 Constraint Programming
- CS5228 Knowledge Discovery and Data Mining
- CS5246 Text Mining
- CS5260 Neural Networks and Deep Learning II
- CS5469 Fundamentals of Logic in Computer Science
- CS5477 3D Computer Vision
- CS5478 Intelligent Robots: Algorithms and Systems
- CS5461 Algorithmic Mechanism Design
- CS6207 Advanced Natural Language Processing
- CS6208 Advanced Topics in Artificial Intelligence
- CS6216 Advanced Topics in Machine Learning
- CS6244 Robot Motion Planning and Control
- IS4242 Intelligent Systems Tools, Techniques, and Applications
- IS5006 Human-Centred Intelligent Systems
- BT4014 Analytics Driven Design of Adaptive Systems
- BT4240 Machine Learning for Predictive Data Analytics