

Department of Computer Science
UNIVERSITY OF THE PHILIPPINES CEBU

CENTER FOR RESEARCH IN INTELLIGENT SYSTEMS LABORATORIES

→ Optimization Research Group

ORG focuses on the application of algorithms such as scheduling, optimization, and resource allocation by integrating state-of-the-art machine learning and artificial intelligence techniques.

→ Natural Language Processing Group

NLP Group focuses on machine translation systems both for local and foreign languages.

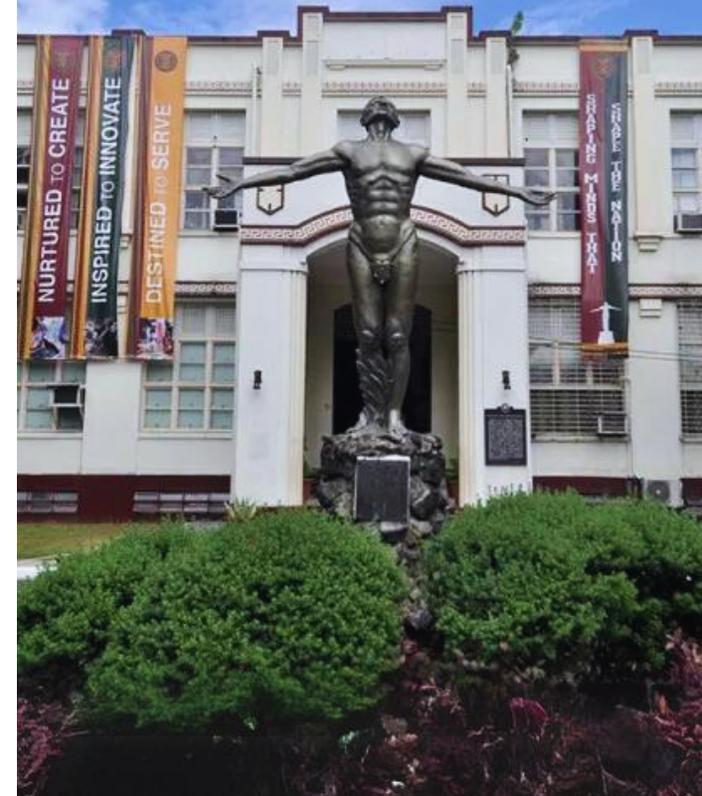
→ Robotics and Internet of Things Group

The RIoT Group focuses on developing innovative solutions that harness the power of connected devices and automation by integrating cutting-edge robotics and IoT principles

→ Image and Video Analysis Research Group

IVAR Group focuses on developing innovative AR applications and conducting research. The group also explores the various aspects of AR, including computer vision, 3D graphics, human-computer interaction, even wearable technology to create immersive and interactive digital experiences that blend the virtual and real worlds.

MASTER OF SCIENCE IN COMPUTER SCIENCE



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Department of Computer Science
University of the Philippines Cebu

Curriculum

A. Core Courses:

One Theory Course	3 units
One Systems Course	3 units
One Theory or Systems Course	3 units
CS 298 Special Problem	3 units

In addition, students need to take the following:

CS 296 Seminar	1 unit
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B. Additional Courses:

Specialization Courses	9 units
Computer Science Elective	-
Elective	3 units
CS 300 Thesis	6 units

TOTAL 31 units

SCAN TO VIEW THE
MSCS STUDY PLAN



LIST OF CORE COURSES

Theory

CS 204 Theory of Computation
CS 210 Advanced Algorithms and Data Structures

Systems

CS 220 Survey of Programming Languages
CS 250 Advanced Operating Systems
CS 255 Advanced Computer Networks
CS 260 Advanced Software Engineering
CS 270 Advanced Database Systems
CS 280 Intelligent Systems

LIST OF SPECIALIZATION COURSES

Theory

CS 204 Theory of Computation
CS 208 Complexity Theory
CS 210 Advanced Algorithms and Data Structures
CS 211 Combinatorial Optimization
CS 213 Communication Theory
CS 214 Parallel Algorithms
CS 216 Randomized Algorithms
CS 222 Programming Language Theory
CS 225 Compiler Design and Construction
CS 231 Numerical Computing
CS 236 Scientific Computing
CS 247 Cryptography
CS 271 Database Theory
CS 294 Advanced Topics in Computational Science
CS 290 Advanced Topics in Theoretical Computer Science
CS 297 Special Topics
CS 298 Special Problems
ES 201 Advanced Mathematical Methods in Eng'g. I
ES 202 Advanced Mathematical Methods in Eng'g. II

Systems

CS 220 Survey of Programming Languages
CS 237 Biomedical Informatics
CS 239 Parallel Computing
CS 240 Computer Graphics
CS 242 Scientific Visualization
CS 250 Advanced Operating Systems
CS 253 Computer Security
CS 255 Advanced Computer Networks
CS 256 Computer Systems Performance Analysis
CS 257 Distributed Systems
CS 258 Mobile Computing
CS 259 Network Performance, Modeling and Monitoring
CS 260 Advanced Software Engineering
CS 262 Methods of Software Development
CS 265 Software Quality Assurance

CENTER FOR RESEARCH IN INTELLIGENT SYSTEMS LABORATORIES



Computational Intelligence and Machine Learning Laboratory

CIML studies intelligent algorithms and systems that learn from data, whether crisp or vaguely defined, to solve complex real-world computational problems. Application areas revolve around epidemic modeling, disaster risk prediction, traffic forecasting, and data mining, among others.



Bioinformatics Research Interest Group

BRIG is interested in statistical protein sequence analysis, prediction methods, and development of eLearning systems for molecular biology using Interactive Learning Object (ILO) or digital game-based learning (DGBL).