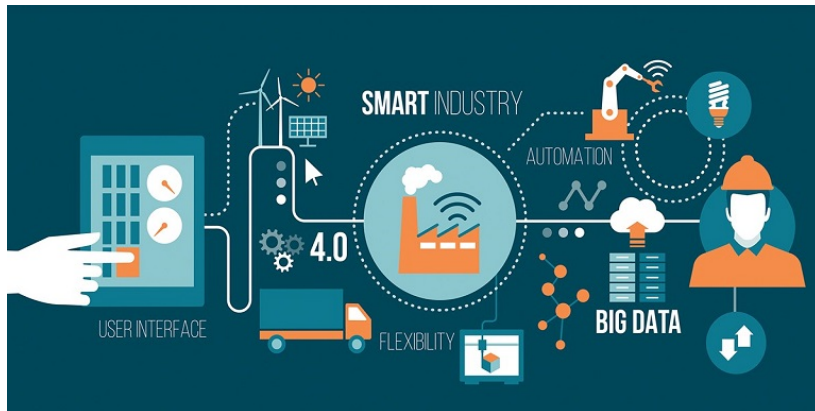
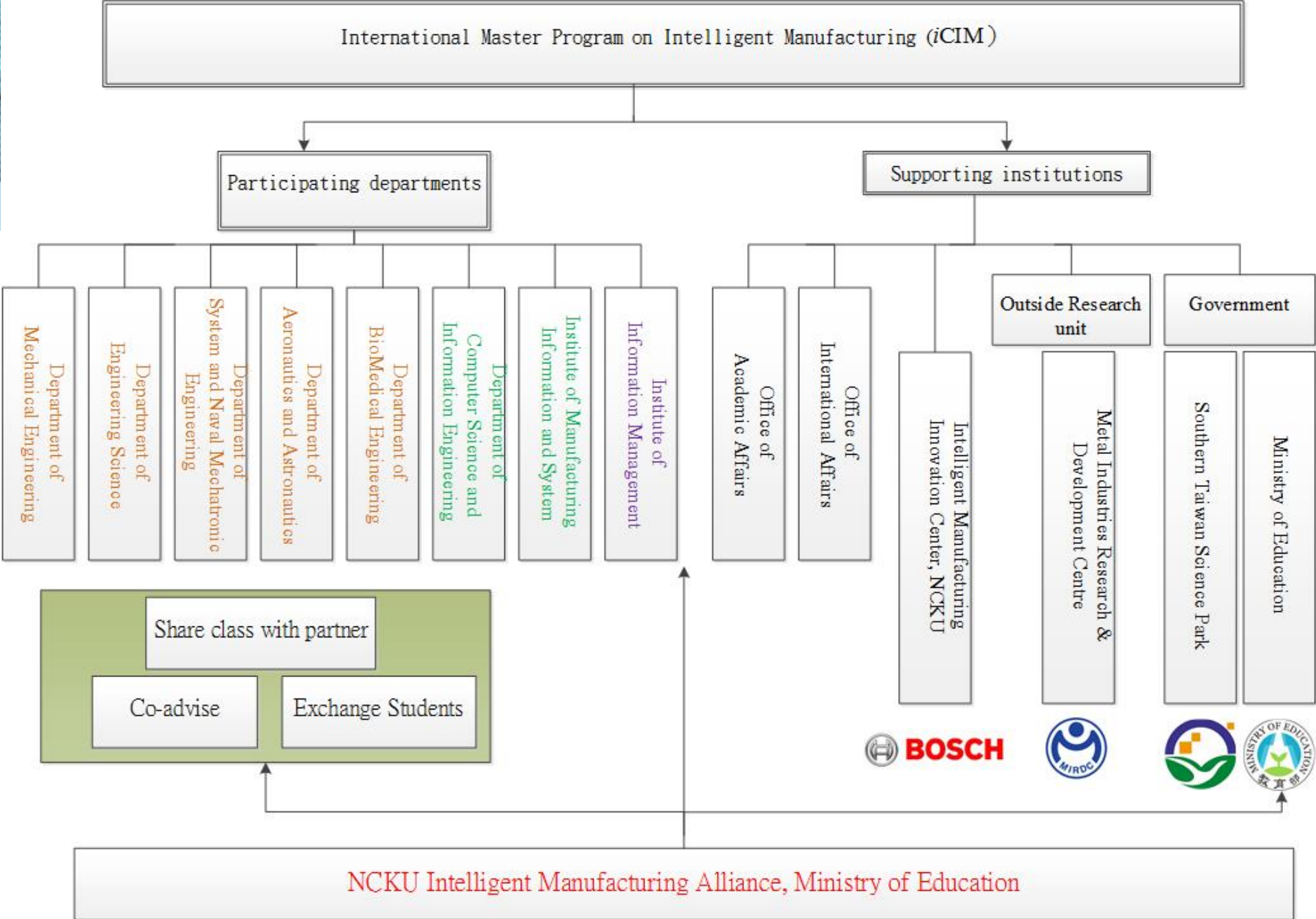


International Master Program on Intelligent Manufacturing (*iCIM*)

- **Educational Objective of the *iCIM*:** The core of the curriculum aims at technology and management of intelligent manufacturing, a key aspect of manufacturing Technologies.
- The curriculum of the *iCIM* is comprehensively co-organized by the faculties from 8 Departments of the **College of Engineering**, **College of Electrical Engineering and Computer Science**, and **College of Management**.
- **All the *iCIM* courses are taught in English.**
- **Specialized Fields:** The *iCIM* Students will learn and be engaged in the study of **Smart intelligence, IoT and management, and AI application.**





Curriculum Planning

Theories and concepts

Teach, discuss, and understand the theories and concepts of intelligent manufacturing



Workshop/ exchange students

Workshop, seminar, team project, and exchange students, etc

Day 17 MONDAY - 10:00 AM - 12:00 PM

10:00-10:30	Check-in/Registration	
10:30-11:00	Check-in/Registration	
11:00-11:30	Check-in/Registration	
11:30-12:00	Check-in/Registration	
12:00-12:30	Check-in/Registration	
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17:30-18:00	Check-in/Registration	
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Practical training

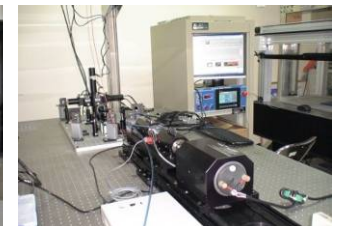
Problem base learning and practice method



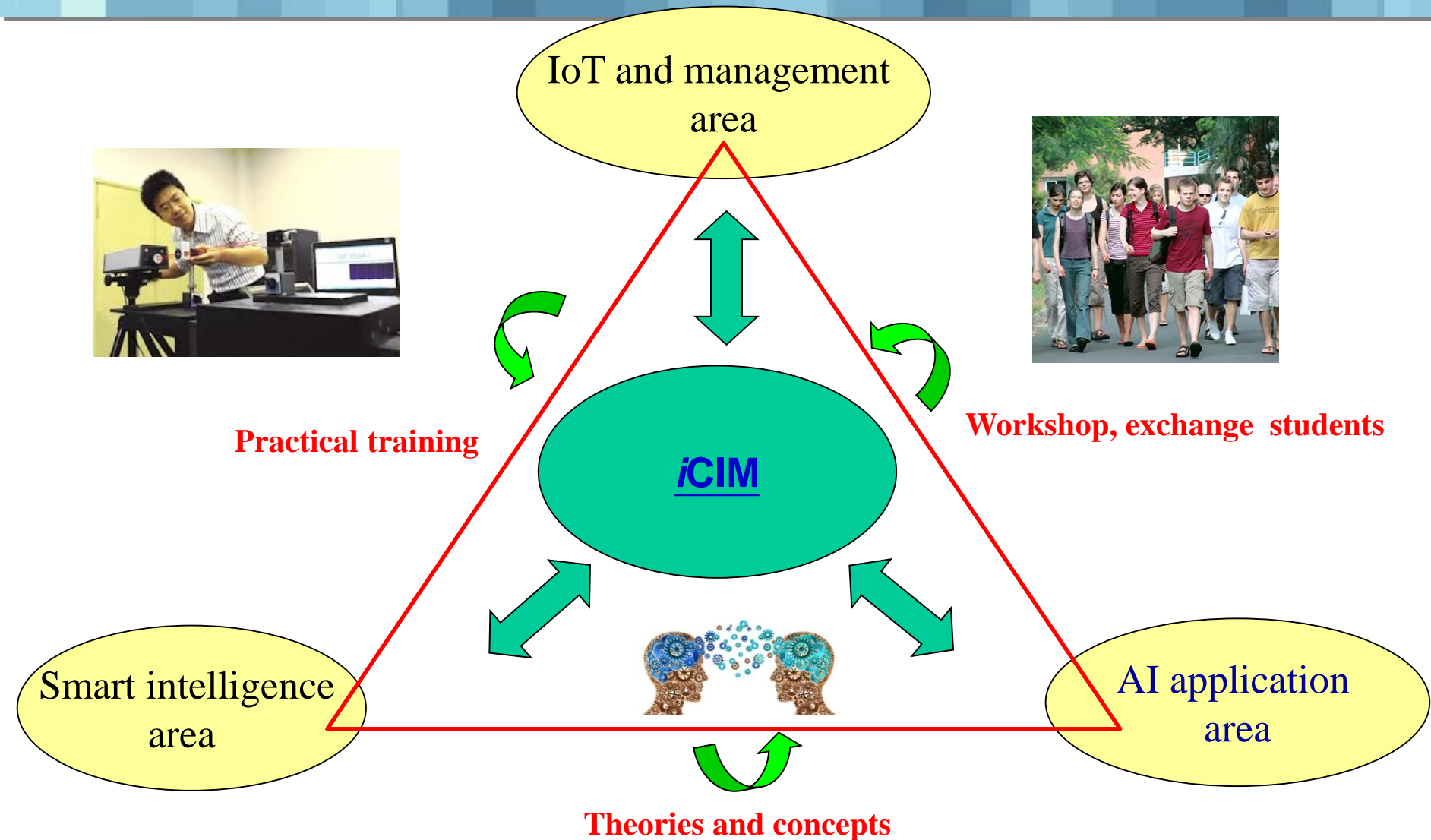
**Design
Rationale**

Cultivation of talent /Industrial service

Cultivate young talent and provide the platform for Industry Collaborations



Curriculum Structure



Course list

【Smart intelligence area】

MACHINE TOOL DYNAMICS
MACHINE VISION
INTRODUCTION TO METALLIC ADDITIVE MANUFACTURING
PRECISION MACHINE DESIGN
COMPUTER INTEGRATED MANUFACTURING
COMPUTER AIDED MANUFACTURING
COMPUTER VISION FROM THEORY TO APPLICATIONS
GRAPH THEORY
SMART SENSING AND MOBILE COMPUTING
DIGITAL IMAGE PROCESSING
SPECIAL TOPICS ON COMPUTER VISION
DIGITAL SIGNAL PROCESSING & FILTERS
BIOMEDICAL MATERIAL
BIODESIGN(1)
BIODESIGN(2)
BIO-INSPIRED TRIBOLOGY

【IoT and management area】

IOT AND BIG DATA FOR SMART MANUFACTURING PROCESS
MANUFACTURING SYSTEMS
E-MANUFACTURING
ENTERPRISE ENGINEERING AND INTEGRATION
REAL-TIME SYSTEM
SPECIAL TOPICS ON INTELLIGENT MACHINE
MANUFACTURING SYSTEM MANAGEMENT
LEAN MANAGEMENT
CYBER PHYSICAL SYSTEM
SMART BUSINESS
DESIGN AND IMPLEMENTION OF IOT DEVICES
INTERNET OF THING(IOT):FROM THEORY TO REALITY-AN OPEN-SOURCED APPROACH
INNOVATIVE DESIGN OF IOT APPLICATION
INFORMATION SECURITY
MANAGEMENT INFORMATION SYSTEMS
INDUSTRIAL INTERNET OF THINGS
SMART MANUFACTURING AND DATA MINING
OPTIMIZATION IN NETWORK MANAGEMENT
INFORMATION SECURITY SYSTEMS

【AI application area】

PROFESSIONAL SKILLS FOR ENGINEERING
THE THIRD INDUSTRIAL REVOLUTION
INTRODUCTION TO ARTIFICIAL INTELLIGENCE AND DEEP LEARNING FOR ENGINEERS AND SCIENTISTS
INTELLIGENT MANUFACTURING SYSTEMS
MACHINE LEARNING
INTELLIGENT COMPUTING AND MACHINE LEARNING
DIGITAL SIGNAL PROCESSING
SYSTEM TECHNIQUES AND R&D DESIGN OF INNOVATIVE MOBILE NETWORKS APPS
GENETIC ALGORITHMS
ARTIFICIAL INTELLIGENCE
APPLICATION OF ARTIFICIAL INTELLIGENCE BASED ON FPGA CHIP DESIGN
USABILITY AND USER INTERFACE DESIGN
MANUFACTURING TECHNOLOGIES OF CYBER PHYSICAL SYSTEM
OPTIMIZATION MODELS AND APPLICATIONS

Credits required

Master Program

- Course requirement
 - 24 credits (Elective subjects)
 - 4 credits (Seminar)

How to apply for the admission

- Start from fall semester of 2020
 - 12 foreign students
 - 8 domestic students

English-Taught Courses

Area	English courses
Smart intelligence	20
IoT and management	19
AI application	14
Total	53