

**Figure 6.3. IOE Core Skills for All Graduates**  
**Human Resource Management (Social)**

Understand social issues in workplace

Work effectively in teams

Manage people effectively

Understand management of diversity

Change Management Skills

Lead and understand leadership principles

Basic conflict management skills

Basic understanding of labor-management relations

***BUSINESS MANAGEMENT***

Understand issues in global business management

Understand business law, liability, intellectual property...

Understand engineering economy

Understand and use project management skills (PERT, Gantt, etc.)

Fundamental knowledge of financial accounting

***PERSONAL MANAGEMENT***

Set goals and efficiently manage time

Develop lifelong learning skills

***MACRO ANALYSIS***

Define a problem and have model to create solution and midstream corrections

Design a complete product or process

***CRITICAL THINKING***

Synthesize information from data

Produce logical inferences

Identify similarities between seemingly different areas (synthesis)

Reduce complicated problems to simpler ones (distillation)

Define ambiguous problems

***OPERATIONS MANAGEMENT***

Understand strategic and operations plans and processes

Understand quality costs and its elements and quality engineering concepts

Understand operations/mfg. planning principles; cost accounting principles; total quality mgmt. and customer satisfaction

Understand and form capacity plans; inventory mgmt. and production control

Understand basic ergonomics and human factors

***INFORMATION SYSTEMS***

Understand use of info. systems and technology in business

Understand algorithm principles and data structures

Develop test plans for information systems

***OPERATIONS RESEARCH***

Solve systems of linear equations

Quantify uncertainty and its impact on efficiency

Use stochastic optimization and simulation models to solve problems

Understand issues in logistics management

Analyze queueing problems