# Technology and Operations Management (TOMS)

## TOMS 5301 [0.25 credit] **Modeling Business Decisions**

Quantitative methods for strategic, tactical, and operational business decision making. Optimization, simulation, project management, decision analysis, and multi-criteria analysis. Underlying ideas, model formulation, computer implementation, and analysis of model results, with applications from various business functions.

Precludes additional credit for BUSI 5600 (no longer offered).

Prerequisite(s): BUSI 5801.

# TOMS 5302 [0.25 credit]

# **Operations Management**

The provision of services and goods to customers, with focus on efficiency, effectiveness, and productivity. Planning and control of processes involving products, workers, equipment, suppliers, and customers. Effects of variation and uncertainty on lead time, inventory, guality, and customer service.

Precludes additional credit for BUSI 5600 (no longer offered).

Prerequisite(s): BUSI 5801.

#### TOMS 5303 [0.25 credit] **Managing Projects**

Foundations and core principles of managing projects with an emphasis on supporting techniques, practices, and methods as means for structuring, analyzing, scoping, planning, executing, monitoring, controlling, and reporting on international development projects.

#### TOMS 5305 [0.25 credit]

#### **International Development Projects Preparation and** Formulation

Processes, assessment methodologies and tools, and practices for designing international development projects, developing funding proposals, managing calls for proposals, organizing procurement, and evaluating the implementation of the project's activities.

#### TOMS 5311 [0.25 credit] **Quality Management**

Defining quality, quality improvement, six sigma, lean enterprise, benchmarking and control charts; guality audits, ISO 9000, ISO 20000 and the progressive excellence program; role of quality assurance in service and product development; Process management and performance excellence.

Precludes additional credit for BUSI 5805 (no longer offered).

Prerequisite(s): BUSI 5801, TOMS 5301 and TOMS 5302.

## TOMS 5312 [0.25 credit] **Technology Development**

Transformation of knowledge and ideas into products, processes and services. Development/innovation process models, successful and efficient integrated product/ process/service development, cross functional teams, quality function deployment, lead-user approach, open innovations paradigm, disruptive innovations, and intellectual property management.

Precludes additional credit for BUSI 5805 (no longer offered).

Prerequisite(s): TOMS 5301 and TOMS 5302.

#### TOMS 5313 [0.25 credit] **Technology Adoption for Services**

Adoption and implementation of technology- driven products and processes for enhanced services. Technology forecasting and scanning; transfer of technologies including technology sourcing, pricing, transfer modes, and success factors; selection of appropriate technology, its vendor and consultant; risk management: managing change.

Precludes additional credit for BUSI 5700 (no longer offered).

Prerequisite(s): TOMS 5301 and TOMS 5302.

#### TOMS 5314 [0.25 credit] Supply Chain Management

Organizational, strategic and operational aspects of managing supply chain from domestic and international perspectives. Outsourcing strategies, supplier relationship and information sharing, supplier networks, contracting and procurement management, logistic integration, role of information technology, and supply chain performance and metrics.

Precludes additional credit for BUSI 5601 (no longer offered).

Prerequisite(s): BUSI 5801.