# 2024-2025



# 香港大學 工業及製造系統工程系 Department of Industrial and

Department of Industrial and Manufacturing Systems Engineering The University of Hong Kong



# MSc(Eng) in Industrial Engineering and Logistics Management (IELM)

**Introductory Brochure** 







Department of Industrial and Manufacturing Systems Engineering

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. *urriculum Background & Aim* 



The aim of the Master of Science in Engineering in Industrial Engineering and Logistics Management [MSc(Eng)(IELM)] curriculum is to offer advanced postgraduate education in industrial engineering and logistics management to graduates who hold managerial, supervisory or administrative positions in industrial and service sectors. The curriculum enables students to acquire necessary knowledge in logistics and supply chain systems and operations, operational research, ergonomics, finance, shipping law, e-commerce, and industrial data analytics. To enhance the skillset of modern industrial engineers/managers (IE), other courses such as healthcare engineering, cyber-physical systems, virtual reality, financial engineering are also offered. Also included in the curriculum is a major capstone project that aims at strengthening students' capabilities in research or development, or both.

Essentially, IEs are involved in the design and management of operations for the production and delivery of products or services to customers. Therefore, they play a very important and direct role in providing value to their customers. Their job nature was usually, and neatly, described as the utilisation and management of the 5M, namely Machine, Man, Material, Method, and Money. However, this traditional view has been significantly challenged by recent phenomena such as de-globalisation (or trade regionalisation), greater degree of customisation of products/services, evolving digital economy, and not least, greater risks arising from geopolitics, and natural disasters. All these have greatly increased the complexity involved in the management of supply chain and logistics operations. The IELM curriculum is designed to offer students the fundamentals together with suitable specialisations, whereas the depth elements come from their R&D undertakings through capstone components within the curriculum.

The world economy is suffering from the undesirable competitions among the world's great powers. While these threats are worrying and affecting many aspects of our lives, the opportunities for economic growth, particularly in this part of the world, are still plenty. For example, the Regional Comprehensive Economic Partnership (RCEP) is expected to significantly enhance the economic development in Asia Pacific. Also, the Greater Bay Area (GBA) initiative for which the HKSAR plays a unique role will provide enormous opportunities to young engineers. With the developments of various smart cities in the GBA, jobs in advanced manufacturing and logistics, innovative services of sorts, and R&D will be available to them aplenty. Especially, IE's contributions to these developments are underlined by their specialised capabilities in products/services realisation and delivery, in using new technologies in the design of work, etc. The IELM curriculum aims at educating IEs with such vision and competence.



# 1st Semester

Enrolment period	7 <sup>th</sup> August, 2024 to 14 <sup>th</sup> August, 2024
First day of teaching	2 <sup>nd</sup> September, 2024
Add / Drop period	2 <sup>nd</sup> September, 2024 to 15 <sup>th</sup> September, 2024
Reading week	14 <sup>th</sup> October, 2024 to 19 <sup>th</sup> October, 2024
Examination period	7 <sup>th</sup> December, 2024 to 23 <sup>rd</sup> December, 2024

# 2nd Semester

First day of teaching	20 <sup>th</sup> January, 2025
Reading week	10 <sup>th</sup> March, 2025 to 15 <sup>th</sup> March, 2025
Examination period	12 <sup>th</sup> May, 2025 to 27 <sup>th</sup> May, 2025

# Curriculum Information

The curriculum structure is modular and students are required to study a total of 72 credits in order to graduate. Normally, each lecture-based course constitutes 6 credits, whereas the MSc dissertation/project constitutes 24 credits.

# **Period of Study**

The curriculum can be taken in one of the following study modes:

- Full-time: 1-year mode (Maximum period: 2 years); or
- Part-time: normal period of study is 2 to 3 years

# **Enrollment Mode**

- Option 1: 8 learning courses (48 credits, including 2 Fundamental courses) + Dissertation (24 credits)
- Option 2: 10 learning courses (60 credits, including 2 Fundamental courses) + Project (12 credits)

# **Curriculum** Structure

	<b>Enrolment Mode</b>				
Course Category	8 Courses + Dissertation	10 Courses + Project			
Discipline Courses (including at least 2 Fundamental Courses)	Not less than 36 credits	Not less than 48 credits			
Elective Courses	Not more the	an 12 credits			
Capstone	DissertationProject(24 credits)(12 credits)				
Total	72 credits				

# **Courses Units - Fundamental Courses** (Students are required to choose at least 2 out of 3)

**IMSE7015** Engineering Economics and Finance (offered in 1st Semester (A/B Class) and 2nd Semester)

Engineering economics fundamentals: cost concepts, money-time relationships, comparing alternatives, depreciation and income taxes, cost estimation, price changes and exchange rates, replacement analysis, effects of uncertainties; financial statements, ratio analysis, financial performance, financial planning and growth; capital budgeting: investment criteria, project analysis and evaluation, project cash flow; cost of capital, long-term financial policy, financial leverage and capital structure policy.

**IMSE7020** Supply Chain Management\* (offered in 1st Semester (A/B Class) and 2nd Semester)

Supply chain characterisation; operation objectives; distribution channels; channel design considerations; logistics network design. Inventory management; risk pooling; distribution strategies. Strategic alliances; international issues in supply chain management; coordinating product and supply chain design; customer value. Information technology; decision support systems; the value of information in supply chains. Case studies and contemporary topics on supply chain management; the beer game.

IMSE7034 Operational Research\* (offered in 1st Semester (A/B Class) and 2nd Semester)

The philosophy and methodology of Operational Research: problem analysis, model building, and implementation of solutions. Mathematical programming and its applications in logistics and supplies: vehicle scheduling, transportation and transshipment problems. Replacement models for capital equipment and preventive replacement for components of low capital value. Risk analysis for capital expenditure proposals. Queuing theory and event simulation with applications in serial and parallel supply chains.

# **Courses Units - Discipline Courses**

IMSE7111 Data-driven Optimisation (offered in 1st Semester and 2nd Semester)

Overview of data-driven optimization and intelligent analytics; Genetic algorithms; Simulated annealing algorithm; Tabu search algorithm; Particle swarm optimization; Ant colony optimization; Predatory search strategy; Computational techniques and intelligent optimization strategies for dynamic systems; Data mining, decision analytics; Applications in multiple objective optimization; Applications in constraint problems; Multiple level optimization; Case studies in supply chain, logistics, manufacturing and service applications.

IMSE7119 Digital Enterprises and E-commerce (offered in 1st Semester and 2nd Semester)

Overview and development of e-business; e-business technologies and solutions: appraisal and selection, implementation and adoption; Enterprise information and knowledge portals, virtual enterprises; Roles of ebusiness in enterprise development and integration; corporate social accountability and responsibility standards; digital technologies for product design and development; cryptographic algorithms for corporate data and IP protection; mobile technology and electronic payment, smart cards, RFID and NFC.

# **IMSE7137** Virtual reality for systems engineering (offered in 2nd Semester)

Fundamental concept of virtual reality, augmented and mixed reality; human perception and virtual reality; system components of modern virtual reality systems; applications of virtual reality technology in engineering systems design and analysis, immersive and interactive virtual environments; innovation and consciousness with virtual reality system development and deployment, ethical issues and social impacts of adopting virtual reality in system development. Designing and building virtual systems with immersive virtual reality systems including CAVE-like environment and VR headsets.

**IMSE7138** Healthcare Systems Engineering\* (offered in 1st Semester)

Introduction to healthcare delivery systems; healthcare technology-human integration; human factors in healthcare; crew resource management; quality of care; economic analysis in healthcare; healthcare logistics; healthcare system test and evaluation; analysis and design for patient safety.

**IMSE7139** Cyber-Physical Systems (offered in 1st Semester)

This course mainly consists of lectures and projects. The topics include introduction to cyber-physical systems (CPS), sensors and sensor networks, robotics and automation, communications for CPS, data analytics in CPS, digital twins, cloud computing for CPS, and system integrations. By completion of the projects, the topics will be discussed in the related lectures and hands-on experiments. The outcomes of the each individual projects will be integrated at the end to address CPS from system point of view as well in applications related settings.

IMSE7140 Machine Learning for Industrial Engineering (offered in 1st Semester)

A brief introduction to machine learning; under the hood: a small neural network; deep learning for computer vision; deep learning for text and sequences; deployment of large models; support vector machines and kernel methods; decision trees, ensemble learning, and random forests; unsupervised learning, reinforcement learning, and active learning; model Tuning; some advanced topics.

IMSE7142 Computational methods for industrial engineering (offered in 1st Semester)

This course teaches fundamental computational methods and the applications to engineering problems in the context of industrial engineering. Analytical models, algorithms, and simulation methods will be discussed. Variability and uncertainty in engineering problems. Foundations of probability, sampling distributions, confidence intervals. Interpolation and regression. Numerical solution of linear and non-linear equations, numerical differentiation and integration, boundary value problems, initial value problems and partial differential equations. Monte Carlo method.

**IMSE7143** The internet of things (offered in 1st Semester)

Theory and fundamentals of internet of things (IoT). Methods to create abstractions, formalisms and semantics at IoT layer. Artificial intelligence of things, machine learning for IoT, edge computing. IoT challenges in security, reliability and privacy. Device software development, IoT in cloud-to-thing continuum. IoT software development, test beds and quality assurance. Sensors and actuators, remote operations and control. IoT applications in manufacturing, construction, healthcare, logistics and supply chain management.

**IMSE7150** Frontiers in Industrial Engineering and Logistics Management A - Intelligent robotics in logistics and manufacturing (offered in 1st Semester)

This course covers the principles and technologies involved in intelligent robotics. The topics include emerging technologies in industrial and manufacturing automation, intelligent robotics in logistics, robot control and planning systems, mobile robots, robot perception and navigation, human-robot interaction and robot learning. This course mainly consists of lectures, and projects.

**IMSE7151** Frontiers in Industrial Engineering and Logistics Management B - Sensors and big data for industrial and logistics (offered in 2<sup>nd</sup> Semester)

This course covers the principles and technologies involved in intelligent robotics. The topics include emerging technologies in industrial and manufacturing automation, intelligent robotics in logistics, robot control and planning systems, mobile robots, robot perception and navigation, human-robot interaction and robot learning. This course mainly consists of lectures, and projects.

**IMSE7152** Frontiers in Industrial Engineering and Logistics Management C - Technology innovation and entrepreneurship (offered in 1st Semester)

In this comprehensive course on technology innovation startups, students will gain a deep understanding of the key concepts and principles that drive entrepreneurial success in the technology sector. They will learn how to develop and evaluate effective business models tailored for technology-based startups, make informed strategic decisions to address organizational challenges, and identify and assess potential financing options to fuel growth. Through analyzing real-life case studies of successful and unsuccessful technology innovation startups, students will be able to apply lessons learned to their own ventures, ultimately implementing a viable business plan.

**IMSE7153** Frontiers in Industrial Engineering and Logistics Management D - Venture finance for technology start-up (offered in 2<sup>nd</sup> Semester)

In this course, students will engage in case discussions and lectures to explore entrepreneurial finance, catering to aspiring entrepreneurs and venture capitalists. The curriculum covers five key aspects of deal-making: evaluating and valuing businesses, financing, deal structuring, shareholding and employment, and exit strategies. By examining these areas, students will develop a thorough understanding of the financial components involved in launching and growing a technology start-up, enabling them to apply these concepts in real-life situations.

**IMSE7154** Intelligent technologies for industrial engineering A - Digital Manufacturing and Service Systems (offered in winter break)

This course aims to provide students with an understanding of the fundamentals of modeling, design, analysis, and optimization of manufacturing and service enterprises. Autonomous building of models from data is discussed. Different models and methodologies supporting the concept of manufacturing-as-a-service embedded in the edge, fog, and cloud architectures are introduced. The concepts introduced in the course are illustrated with case studies.

**IMSE7212** Physical internet (offered in winter break)

Logistics network history and topology, organisation and performance, logistics networks sustainability, asset utilization. Interconnection principles; Digital Internet, Physical Internet, Internet of Things. Physical Internet components: containerisation diversity, modularity, handling and sorting. Logistics information capture, publication, EPCglobal standards. Flow routing and assets management in open-loop supply networks. Collaborative logistics business models, small scale cooperative game with transferable utility, Shapley value and core solution, big scale collaboration models, mechanism design, combinatorial optimisation. Case studies, web search, serious game.

**IMSE7222** Global logistics and transportation systems\* (offered in 1st Semester)

Global operations and logistics strategies, strategic changes required by globalization, the strategic framework for global operations, the role of logistics in global operations and marketing strategies; global operations and logistics planning, supplier network development, physical distribution, global logistics network design, global supply chain management, risk management in global operations; management of global operations and logistics, operations analysis of global supply chains, information management for global logistics, performance measurement and evaluation in global logistics.

## IMSE7251 Fundamentals of law for logistics\* (offered in 2nd Semester)

The course focuses on five areas of law essential to industrial and logistics managers: contracts, agency, shipping law, negligence and dispute resolution; overview of sources of law and legal structure of businesses; elements of a binding contract; duties of an agent, including common carriers, employees and professionals; claims arising in international shipment of goods, arbitration, mediation or litigation and venue for dispute resolution.

# **IMSE7310** Financial Engineering\* (offered in 1st Semester)

Basics of financial markets; cash flow analysis; capital asset pricing model (CAPM); portfolio optimisation; arbitrage and fundamental theorem of asset pricing; types of derivatives including forward, futures and options for various underlying assets; returns, value-at-risk (VaR), utility functions; pricing and hedging of derivative securities; numerical studies.

### **IMSE7337** Operational Risk Management\* (offered in 2nd Semester)

Basics of risk management, risk and return, lifecycle of risk management, operational risk management (ORM) components; risk management framework: standards, management environment, management processes; operational risk assessment: assessment, identification, scale of assessment; risk reporting: risk indicators, risk map. Risk management strategies: risk avoidance, mitigation, transfer and acceptance; applications: supply chain management, product development, environment, health and safety risks; crisis management.

### IMSE7505 Intelligent transportation and autonomous driving (offered in 2nd Semester)

This course will introduce students to the field of autonomous mobile robotics. Topics will focus on definition and applications of mobile robots; mobile robot components and architecture; kinematics and dynamics of mobile robots; sensors for mobile robots; planning and navigation for mobile robot; simultaneous localization and mapping; mobile manipulators; applications. The assignments of this course will involve building and testing autonomous mobile robots using simulation software and physical robots.

### **IMSE7506** Advanced machine learning methods (offered in 2nd Semester)

This course provides a detailed examination of various advanced topics in machine learning for industrial engineering, including five main directions: generative models, inference algorithms, predictive models, discovery models, and action-related models. It will cover not only the popular models, such as diffusion models, generative adversarial networks (GANs), and reinforcement learning models, but also significant classical algorithms in depth, such as Kalman filter, Markov Chain Monte Carlo (MCMC), Principal Component Analysis (PCA), and Independent Component Analysis (ICA).

(**NB** As the sequel to the course IMSE 7140 Machine Learning for Industrial Engineering, this course requires skills in Python programming, an understanding of core machine learning concepts, and knowledge of calculus, linear algebra, probability, and statistics -

at an elementary level. IMSE 7140 covers the first two prerequisites, so completing IMSE 7140 is recommended but not required for enrolling in this course.)

IMSE7902 Project Management\* (offered in 1st Semester and 2nd Semester)

Fundamental of project management; PMBOK's project management framework; Project initiating, planning, executing, monitoring and controlling, and closing; Project integration management; Project scope management; CPM/PERT techniques for project time management, resource allocation and cost management; Earned value analysis for project tracking; Application of techniques such as EMV, decision tree analysis, and Monte Carlo simulation in project risk management, human resource management, communication, procurement and quality management for industrial projects; Project change control and management; Project team-building; Case studies in logistics and manufacturing industries.

**IMSE7909** Quality Management\* (offered in 2nd Semester)

The principals of Total Quality Management and BS 7850. Basic tools of quality management, the Japanese approaches to quality management, 5S and Kaizen. Deming's approach to quality management. International quality assurance management system -- the ISO 9000 series, quality documentation, quality audit. Zero defects and Six Sigma. The American Malcolm Baldrige quality award. Quality Function Deployment. The Taguchi Methods.

\*Approved for reimbursement from the Continuing Education Fund (CEF)

# **Courses Units - Capstone (Project and Dissertation)**

(NB Student must enrol in IMSE7098 Project or IMSE7099 Dissertation upon his/her first enrolment in courses.)

# **IMSE7098** Project (12 Credits)

This course is mainly based on group projects enhanced by a series of invited guest lectures. Project topics are related to major research and/or industrial projects and initiatives that supervisors have recently carried out. Groups are expected to generate project deliverables of a variety of forms including patents, software copyrights, research papers, proof-of-the-concept solutions and products, consultancy reports / whitepapers, etc.

**IMSE7099** Dissertation (24 Credits)

The course offers students the opportunity to use the Industrial Engineering theories, techniques, skills, and concepts taught in the degree programme to tackle an industrial or a research problem in the areas of logistics, transportation and supply chain management. The student is required to identify (or establish) a suitable research methodology and to develop innovative solutions to the problem. Dissertation is an individual undertaking under the supervision of a member of teaching staff. The specific problem area will be determined through consultation with the supervisor. In the case of an industrial project, the student will need to regularly visit the collaborating organization(s) to collect the relevant data and information.

# Other Useful Information

# **Composition Fee**

	Local Students	Non-local Students
MSc(Eng)	Total	Total
	\$210,800	\$281,000
	Full-time students (1 yr)	Full-time students (1 yr)
	\$105,400 x 2	\$140,500 x 2
	(paid in 2 instalments)	(paid in 2 instalments)
	Part-time students (2 yrs)	Part-time students (2 yrs)
	\$52,700 x 4	\$70,250 x 4
	(paid 4 instalments)	(paid in 4 instalments)

- For students who fail to complete the required credits within the normative study period, the composition fee will continue to be charged on semester basis beyond the normative study period.
- Students who are on Leave of Absence (LoA) at a given semester do not need to pay the instalment for that semester. However, if students apply a brief period of LoA (e.g. 1 week), they will still require to pay the full tuition instalment.
- As it is not required to pay any instalment during the summer semester, students are encouraged to make good use of the summer semester for their studies.

# **Prizes / Scholarships**

- MSc(Eng)(IELM) Distinction Prize
  - ➢ 6-10 awardees each year
  - > each of HK\$10,000 awarded to those who graduate with Distinction
  - nominate by Department of IMSE
- Tony Reynolds Academic Excellence Prize
  - awarded annually to students based on his/her performances in Dissertation (IMSE7099) or Project (IMSE7098) with A- or above and the cumulative GPA of 3.0 or above
  - ▶ each prize shall not be less than HK\$2,000.
  - > nominate by Department of IMSE

- IICL Postgraduate Scholarships in Logistics Management
  - ➢ 1 prize worth HK\$19,000
  - Merit-based scholarships for current students
  - nominate by Department of IMSE
- MSc(Eng)(IELM) Knowledge Exchange Scholarship
  - > Part-time students who are permanent residents of HK
  - Nominate by Department of IMSE







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# Part-time/Adjunct Teaching Staff

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Timetables for 2024-25: First and Second Semesters

Curriculum	MON	DAY	TUESDAY	WEDN	ESDAY	THURSDAY	FRIDAY		SATURDAY	
Industrial Engineering and Logistics Management	IMSE7143 The internet of the	hings	IMSE7142 Computational methods for industrial engineering			IMSE7138/IMSE4538 Healthcare systems engineering	IMSE7020 1   Supply chain management 1   (Subclass B) 4		IMSE7140 Machine learning and applications	IMSE7152 Frontiers in industrial engineering and logistics management C
	Instructor(s): Instructor Prof. SY Hu Prof. Y 2		Instructor(s): Prof. Y Xu			Instructor(s): Prof. CKL Or	Instructor(s): Dr. JWC Ng		Instructor(s): Dr SJ Qin	Instructor(s): Mr. N Xu
	Room: HW1-3		Room: LE8			Room: MB167	Room: TT403		Room: MB201	Room: LE2
	9:30am-12:30pn	1	9:30am-12:30pm			9:30am-12:30pm	9:30am-12:30pm		10:00am-1:00pm	10:00am-1:00pm
				IMSE7119 Digital enterpris e-Commerce	es and	IMSE7222 Global logistics and transportation systems	IMSE7111 Data-driven optimization ns		IMSE7034 Operational research (Subclass B)	
			Instructor(s):Instructor(s):Instructor(s):Dr. SH ChoiProf. FN ZhangDr. JW Wang			Instructor(s): Dr. JW Wang				
				Room: HW 1-3		Room: HW1-3	Room: HW1-3 *Please refer to the next page for special arrangements in reading week		Room: KK102 *Please refer to the next page for special arrangements in reading week	
				1:30pm-4:30pm		2:30pm-5:30pm	3:30pm-6:30pm		2:30pm-5:30pm	
	IMSE7015 Engineering economics and finance (Subclass A)	IMSE7310 Financial engineering	IMSE7020 Supply chain management (Subclass A)	IMSE7015 Engineering economics and finance (Subclass B)	IMSE7139 Cyber- physical systems	IMSE7150 Frontiers in industrial engineering and logistics management A	IMSE7034 Operational research (Subclass A)	IMSE7902 Project management		
	Instructor(s): Mr. Wilson Chow	Instructor(s): Prof. PC Chen	Instructor(s): Dr. JWC Ng	Instructor(s): Mr. Wilson Chow	Instructor(s): Prof. N Xi / Dr JC Chen	Instructor(s): Prof. HP Chen	Instructor(s): Dr. JW Wang	Instructor(s): Mr. Bill Chan		
	Room:KK101	Room: LE2	Room: LE2	Room: LE2	Room: CPD- LG.07	Room: HW1-3	Room: LE2 *Please refer to the next page for special arrangements in reading week	Room: KK101		
	7:00pm- 10:00pm	7:00pm- 10:00pm	7:00pm-10:00pm	7:00pm- 10:00pm	7:00pm- 10:00pm	7:00pm-10:00pm	7:00pm-10:00pm	7:00pm- 10:00pm		

### THE UNIVERSITY OF HONG KONG DEPARTMENT OF INDUSTRIAL AND MANUFACTURING SYSTEMS ENGINEERING

### Special arrangement for IMSE7034 and IMSE7111in the week of October 15, 2024 to October 19, 2024 (Reading Week)

### MSc(Eng)(IELM)

Curriculum	MONDAY October 14, 2024	TUESDAY October 15, 2024	WEDNESDAY October 16, 2024	THURSDAY October 17, 2024	FRIDAY October 18, 2024	SATURDAY October 19, 2024
Industrial Engineering and Logistics Management		IMSE7111 Data-driven optimization Instructor(s):		IMSE7034 Operational research (Subclass A) Instructor(s):		
		Dr. JW Wang		Dr. JW Wang		
		Room: KK201		Room: KK201		
		12:30pm-3:30pm		12:30pm-3:30pm		
		IMSE7034 Operational research (Subclass A)	IMSE7034 Operational research (Subclass B)	IMSE7111 Data-driven optimization	IMSE7111 Data-driven optimization	IMSE7034 Operational research (Subclass B)
		Instructor(s):	Instructor(s):	Instructor(s):	Instructor(s):	Instructor(s):
		Dr. JW Wang	Dr. JW Wang	Dr. JW Wang	Dr. JW Wang	Dr. JW Wang
		Room: KK201	Room: KK102	Room: KK201	Room: KK201	Room: KK102
		3:30pm-6:30pm	3:30pm-6:30pm	3:30pm-6:30pm	3:30am-6:30pm	2:30pm-5:30pm
		IMSE7034 Operational research (Subclass A)	IMSE7034 Operational research (Subclass B)	IMSE7111 Data-driven optimization	IMSE7034 Operational research (Subclass A)	
		Instructor(s):	Instructor(s):	Instructor(s):	Instructor(s):	
		Dr. JW Wang	Dr. JW Wang	Dr. JW Wang	Dr. JW Wang	
		Room: KK201	Room: KK102	Room: KK201	Room: KK201	
		7:00pm-10:00pm	7:00pm-10:00pm	7:00pm-10:00pm	7:00pm-10:00pm	

### THE UNIVERSITY OF HONG KONG DEPARTMENT OF INDUSTRIAL AND MANUFACTURING SYSTEMS ENGINEERING

#### Timetable for 2024-25 MSc(Eng): 6 January, 2025 to 17 January, 2025 (Intensive Course)

# MSc(Eng)(IELM)

Programme	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
Industrial Engineering and Logistics Management	IMSE7154 <sup>#</sup> Intelligent technologies for industrial engineering A	IMSE7154 <sup>#</sup> Intelligent technologies for industrial engineering A	IMSE7154 <sup>#</sup> Intelligent technologies for industrial engineering A	IMSE7154 <sup>#</sup> Intelligent technologies for industrial engineering A	IMSE7154 <sup>#</sup> Intelligent technologies for industrial engineering A	IMSE7154 <sup>#</sup> Intelligent technologies for industrial engineering A
	Instructor(s): Prof. A. Kusiak	Instructor(s): Prof. A. Kusiak	Instructor(s): Prof. A. Kusiak	Instructor(s): Prof. A. Kusiak	Instructor(s): Prof. A. Kusiak	Instructor(s): Prof. A. Kusiak
	Room: KK101 January 6, 2025 9:30am-12:30pm	Room: KK101 January 7, 2025 9:30am-12:30pm	Room: KK101 January 8, 2025 9:30am-12:30pm	Room: KK101 January 9, 2025 9:30am-12:30pm	Room: KK101 January 10, 2025 9:30am-12:30pm	Room: KK101 January 11, 2025 2:30pm-5:30pm
	January 13, 2025 9:30am-12:30pm		January 15, 2025 9:30am-12:30pm	January 16, 2025 9:30am-12:30pm	January 17, 2025 9:30am-12:30pm	

# The add/ drop period is the first 2 lessons of this course.

# Examination (2 hours): March 12, 2025 (Wednesday), 3:00pm-5:00pm.
(Note: The examination results of IMSE7154 will be released together with all other courses to be offered in the 2<sup>nd</sup> Semester).

### THE UNIVERSITY OF HONG KONG DEPARTMENT OF INDUSTRIAL AND MANUFACTURING SYSTEMS ENGINEERING

#### Timetable for 2024-25 MSc(Eng): 6 January, 2025 to 16 January, 2025 (Intensive Course)

### MSc(Eng)(IELM)

Programme	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
Industrial Engineering and Logistics	IMSE7212 <sup>#</sup> Physical Internet	IMSE7212 <sup>#</sup> Physical Internet	IMSE7212 <sup>#</sup> Physical Internet	IMSE7212 <sup>#</sup> Physical Internet	IMSE7212 <sup>#</sup> Physical Internet	
Management	Instructor(s): Prof. E Ballot	Instructor(s): Prof. E Ballot	Instructor(s): Prof. E Ballot	Instructor(s): Prof. E Ballot	Instructor(s): Prof. E Ballot	
	Room: CBA	Room: CBA	Room: LE4	Room: CBA	Room: LE4	
	January 6, 2025 2:00pm-5:00pm	January 7, 2025 2:00pm-5:00pm	January 8, 2025 2:00pm-5:00pm	January 9, 2025 2:00pm-5:00pm	January 10, 2025 2:00pm-5:00pm	
	January 13, 2025 2:00pm-5:00pm	January 14, 2025 9:30am-12:30pm 2:00pm-5:00pm	January 15, 2025 2:00pm-5:00pm	January 16, 2025 2:00pm-5:00pm		

# The add/ drop period is the first 2 lessons of this course.

# Examination (2 hours): March 14, 2025 (Friday), 3:00pm-5:00pm.
(Note: The examination results of IMSE7212 will be released together with all other courses to be offered in the 2<sup>nd</sup> Semester).

### THE UNIVERSITY OF HONG KONG FACULTY OF ENGINEERING <u>Timetable for 2024-2025 MSc(Eng): Second Semester (Tentative)</u>

MSc(Eng)(IELM)

Curriculum	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY		SATURDAY
Industrial Engineering and Logistics Management	IMSE7902 Project management	IMSE7137 Virtual reality for systems engineering	IMSE7111 Data-driven optimization	IMSE7020 Supply chain management	IMSE7034 Operational research		IMSE7506 Advanced machine learning methods (new) (Subject to approval)
	Instructor(s): Mr. Bill Chan	Instructor(s): Dr. LKY Chan	Instructor(s): Prof. FN Zhang	Instructor(s): Dr. JWC Ng	Instructor(s): Prof. Y Cheng		Instructor(s): Dr SJ Qin
	Room: HW1-3	Room: HW 1-3	Room: CBC	Room: HW1-3	Room: LE5		Room: KK202
	9:30am-12:30pm	10:00am-1:00pm	9:30am -12:30pm	10:00am-12:30pm	9:30am -12:30pm		10:00am -1:00pm
	IMSE7251 Fundamentals of law for logistics (Subclass A)		IMSE7119 Digital enterprises and e- Commerce				IMSE7505 Intelligent transportation and autonomous driving (new) (Subject to approval)
	Instructor(s):		Instructor(s):				Instructor(s): TBC
	Mr. D Meyer		Dr. SH Choi				
	Room: HW1-3		Room: HW 1-3				Room: KK202
	2:30pm-5:30pm		1:30pm-4:30pm				2:30pm-5:30pm
	IMSE7337 / IMSE4137 Operational risk management	IMSE7251 Fundamentals of law for logistics (Subclass B)	IMSE7909 Quality management	IMSE7151 Frontiers in industrial engineering and logistics management B	IMSE7015 Engineering economics and finance	IMSE7153 Frontiers in industrial engineering and logistics management D (new) (Subject to approval)	
	Instructor(s): Prof. Y Cheng	Instructor(s): Mr. D Meyer	Instructor(s): Mr. Bill Chan	Instructor(s): Prof HP Chen	Instructor(s): Mr. Wilson Chow	Instructor(s): Mr. N Xu	
	Room: KKLG109	Room: KK101	Room: KK101	Room: KK101	Room: KK101	Room: LE2	
	7:00pm-10:00pm	7:00pm -10:00pm	7:00pm -10:00pm	7:00pm-10:00pm	7:00pm -10:00pm	7:00pm -10:00pm	

Second Semester

DATES OF SEMESTER FOR THE	SEMESTER	SEMESTER DATES	TEACHING PERIOD	NOTA	TIONS:
FACULTY OF ENGINEERING	First	02.09.2024-23.12.2024	02.09.2024-30.11.2024	CB	= Chow Yei Ching Building
	Second	20.01.2025-27.05.2025	20.01.2025-03.05.2025	CPD	= Central Podium Levels (Centennial Campus)
	Summer	30.06.2025-23.08.2025	30.06.2025-23.08.2025	CYP	= Chong Yuet Ming Physics Building
				EH	= Eliot Hall
				GH	= Graduate House
				HW	= Haking Wong Building
				KK	= K.K. Leung Building
				JL	= James Hosing Lee Science Building
				LE	= Library Extension Building
				MB	= Main Building
				MW	= Meng Wah Complex
				TT	= T. T. Tsui Building

NOTE: All classes will be suspended during the Chinese New Year holiday from 29.01.2025 – 04.02.2025; Reading week in Semester 1: from 14.10.2024 – 19.10.2024; Reading week in Semester 2: from 10.03.2025 – 15.03.2025

Jul 18, 2024