

IGDS Academic Supervisor List

Name: Professor H. C. Man

Position: Dean of Faculty of Engineering, Chair Professor of Materials Engineering, Director of IGDS

Academic Background: BSc (Lond), MSc (Lough), PhD (Lond), Dip(IC) (Lond), CEng, CLSO, MIMMM, MHKIE, SrMLIA

Research Areas: Materials Technology, Advanced Manufacturing Technology, Laser Materials Processing Technologies

Room: AG711

Phone: 2766 6629

E-mail: hc.man@polyu.edu.hk

Suggested Project Topics:

- Process Improvement
 - Project Management
 - Maintenance and Reliability
 - Manufacturing Strategy
 - Innovation
 - Technology Audit
 - Materials Technology
 - Advanced Manufacturing Technology
 - Laser Materials Processing Technologies
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Name: Professor K. L. Yung

Position: Sir Sze-yuen Chung Professor in Precision Engineering; Chair Professor of Precision Engineering and Associate Head of Department of ISE

Academic Background: BSc (CNA), MSc (Lond), PhD (CNA), CEng, MIEE, FHKIE, Dip(IC) (Lond), SMCMS

Research Areas: Control and Automation, Precision Engineering, CIM

Room: EF629

Phone: 2766 6592

E-mail: kl.yung@polyu.edu.hk

Name: Nick S. H. Chung (Dr.)

Position: Associate Professor and Associate Head of Department of ISE, Associate Director of Studies of IGDS

Academic Background: BEng(HKU), MPhil (HKU), PhD (HKU)

Research Areas: Logistics and Supply Chain Management, Production Scheduling, Distributed Scheduling, Distribution Coordination

Room: EF608

Phone: 3400 3790

E-mail: nick.sh.chung@polyu.edu.hk

Suggested Project Topics:

- Sustainable Urban Logistics for Express Logistics Activities in Mainland China
 - A Study of e-Commerce Activities in Mainland China and United States
 - A Study of Customer Behavior to Online and Offline Store in Mainland China
 - A Study of the Role of Express Logistics to e-Commerce Development
 - Development of Marketing Strategies in e-Commerce
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IGDS Academic Supervisor List

Name: Roy W. C. Law (Dr.)

Position: Associate Professor, Department of ISE

Academic Background: BEng (CUHK), MPhil (CUHK), PhD (State Uni of New York)

Research Areas: Synthesizing nanomaterials for biosensing and bioimaging applications, Building nanoparticle-based biosensing systems

Room: EF604

Phone: 2766 6607

E-mail: roy.law@polyu.edu.hk

Name: Carman K. M. Lee (Dr.)

Position: Associate Professor, Department of ISE

Academic Background: BEng (PolyU), PhD (PolyU), MIET, MIEEE

Research Areas: Logistics Information Management, Manufacturing Information Systems, Product Development and Data Mining Techniques

Room: EF609

Phone: 3400 3899

E-mail: ckm.lee@polyu.edu.hk

Suggested Project Topics:

- Enable Corporate Sustainability through Open Innovation
 - Big Data Analysis in Supply Chain Management
 - A Study of Cross-border eCommerce in China
 - A Study in IoT Technology and Cloud Service for Smart City
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Name: Gary C. P. Tsui (Dr.)

Position: Associate Professor, Department of ISE

Academic Background: BEng(Manufacturing Engineering, PolyU) (1st Class Honours), PhD (Industrial and Systems Engineering, PolyU)

Research Areas: Advanced Manufacturing Technology & 3D/4D printing

Room: EF607

Phone: 3400 3254

E-mail: mfgary@polyu.edu.hk

Suggested Project Topics:

- Towards IoT Applications in Hong Kong from Industrial Engineering Perspective
 - Implementation Challenges of Industry 4.0 Technologies in Manufacturing Companies
 - A Study on Realizing VR/AR/MR for Industry-4.0 Based Manufacturing Companies
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IGDS Academic Supervisor List

Name: P. C. Chen (Dr.)

Position: Senior Teaching Fellow, Department of ISE

Research Areas: Engineering Management and Other Subjects Related to Technology and Energy Management

Room: EF623

Phone: 2766 4976

E-mail: pc.chen@polyu.edu.hk

Suggested Project Topics:

- How Does Corporate Governance Affect Globalization and Performance of Firms?
 - Optimization of Corporation Structure to Promote Technology Innovation
 - Case study: Business Sustainability Reporting Principles and Implementation
 - The Impact of Globalization on Chinese Middle Sized Enterprise
 - Case study: How Can Organizations Develop a Successful Social Media Strategy in the International Business Environment?
 - Develop Corporation Strategies to Expand its Business in an International Market
 - What are the Business Strategies and Key Success Factors for Companies in the International Environment?
 - Value Creation - How can Strategies and Practices Enhance Company's Competitiveness and Simultaneously Achieve Business Sustainability to Create Economic Value and Contribute to Healthy Ecosystems and Strong Communities
 - The Strategy Development to Manage International Collaboration for a China Based Business.
 - Business Motivations for Implementing Strategy in Sustainability
 - How Does the Impact of Customers' Perception on Customer Loyalty in the Context of Business Sustainability?
 - What are the Key Strategic Decisions Facing Companies in Order to Improve their Performance in Business Sustainability?
 - A Study of Leadership, Organizational Culture and Organizational Innovation in Chinese Corporations
 - Organization Flexibility: Is Technological Innovation the Solution for Survival in Turbulent Times?
 - Business Sustainability Analysis via Technology Assessment
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Name: Y. M. Tang (Dr.)

Position: Senior Teaching Fellow, Department of ISE

Academic Background: BSc (CUHK), MPhil (CUHK), PhD (CUHK)

Research Areas: Computer Simulation, Computer Graphics, Computer-aided Design, Finite Element Modeling, Bio-medical Applications

Room: FJ410

Phone: 3400 3940

E-mail: yukming.tang@polyu.edu.hk

Suggested Project Topics:

- Demand Forecasting for Textile Industry
 - Inventory Management for Textile Company
 - Utilizing ERP Management System for Textile Company
 - Design and Development of a Trip Management System
 - Data Analysis for China Indices Prediction
 - Marketing Research for Building Construction Industry
 - Development of CRM system for Design company
 - Digital Marketing for Interior Design Firm
 - Information Management for Investigating Student Study Weaknesses
 - Development of VR Application for Property Industry and Analysis
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IGDS Academic Supervisor List

Name: K. L. Choy (Dr.)

Position: Visiting Lecturer, IGDS

Academic Background: MSc (Warw), MPhil (Warw), PhD (PolyU), CEng MIEE, MIMechE, MHKIE, MILT, MIPSHK

Research Areas: Simulation of Industrial and Logistics Systems, Logistics Engineering and Management, Supplier Relationship Management, RFID and Warehouse Operations

E-mail: kl.choy@polyu.edu.hk

Suggested Project Topics:

- Design of a Business Strategy Framework for Industry [2 Quotas]
 - Development of a Marketing and Operation Strategy Framework for Industry [2 Quotas]
 - Design of a Supply Chain Management Framework for Industry [2 Quotas]
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Name: S. Frankland

Position: Visiting Lecturer, IGDS

Academic Background: MSc (Birm), DGS (Birm), CEng, FMS, FIEE, MIEE

Research Areas: Industrial Engineering, Motion and Time Study, Manufacturing Management

Room: EF614

Phone: 2766 6589

E-mail: steve.frankland@polyu.edu.hk

Suggested Project Topics: [Please refer to the attached list suggested by Mr. Steve Frankland]

Name: Professor W. H. Ip

Position: Visiting Lecturer, IGDS

Academic Background: LLB (Wolv), MSc (Cran), MBA (Brun), PhD (Lough), CEng, FHKQMA, MIEE, MIMechE, MHKIE

Research Areas: Industrial Engineering, AI and Machine Vision Systems, ERP, Logistics and Supply Chain Management

E-mail: wh.ip@polyu.edu.hk

Suggested Project Topics:

- Project Management for the Aircraft Manufacturing Industry
 - An Evaluation of ERP Software for the Aviation Industry
 - A Study of Simulation of a Space Mission Game
 - Healthcare Technology for the Elderly: A Case Study
 - Design and Development of Elderly Care Equipment
 - A Survey of Innovation, Reliability, and their Relationships with IoT for High Tech Industry
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Name: C. K. Kwong (Dr.)

Position: Visiting Lecturer, IGDS

Academic Background: MSc (Nott), PhD (Warw), CEng, MIEE, MHKIE

Research Areas: Integrated Product and Process Design, Product Design and Development, New Product Development, Process Modeling and Optimization

E-mail: c.k.kwong@connect.polyu.hk

Suggested Project Topics:

- Sustainable Product Design
 - Strategic Planning of New Products
 - Modeling of Customer Satisfaction
 - Market Analysis and Planning of Products/Services
 - A Study of Customer Satisfaction on Products/Services
 - Development of a New product Development Methodology and its Application on a Company
 - New Service Design and Development
 - Incorporating Marketing Concerns into Product/Service Design
 - Application of Quality Function Deployment on Defining Design Specification of a New Product/Service
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IGDS Academic Supervisor List

Name: Kris Law (Dr.)

Position: Visiting Lecturer, IGDS

E-mail: kris.law@polyu.edu.hk

Biography:

Dr. Kris Law is an active researcher with extensive international exposure. She was the Discipline lead in engineering management at the School of Engineering, Deakin University. She was also awarded a Docent in Industrial Engineering and Management by Oulu University in Finland for her achievements in research and teaching.

She is currently the Principal Lead of the Institutional and Evaluation Analysis, Education Development Centre at Hong Kong Polytechnic University.

Her research focuses on interdisciplinary engineering management and organisational development topics around Organisational Learning & Development, Infrastructure Systems, Business Ecosystems, Project management, Innovation and Knowledge Management, Entrepreneurship, and Educational Research.

1. Industry level
 - a. Study of competitiveness and performance of energy utilities in China
 - b. Digital transformation of Utilities in China/Hong Kong (or other countries)
 - c. Comparative study of the competitiveness and resilience capability of the electronic manufacturing companies (or tourism industry)
 - d. The benchmark of automotives manufacturers in the smart-city era
 - e. The transformation of public transportation in the AI-era
 2. Organizational level
 - a. Study of the knowledge management /acquisition system in a SME in XX industry in China/Hong Kong
 - b. The organizational learning culture and the performance in (company), in (Hong Kong/China), (or other countries)
 3. Specific application
 - a. Scheduling problem in public transportation
 - b. Sentiment analysis to identify purchasing preference.
 - c. Mega trends in the automotive/ consumer electronics/garment/luxury products/tourism industry in the post COVID era
 - d. Education technologies Pros and Cons
 4. Project proposed by students in the areas of but not limited to: operations & process management, organization studies, engineering education, innovation and technology, knowledge management, LCA studies etc.
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IGDS Academic Supervisor List

Name: Stephen W. K. Ng (Dr.)

Position: Visiting Lecturer, IGDS

Academic Background: EngD (Warwick)

E-mail: drswkng@netvigator.com

- Improvement of Factory Management of High-tech Operations in China
 - Creativity and Innovation to Apply One-Belt, One Road Strategies for Companies in China
 - Development of an Integrated Logistics Support System for a Manufacturing Company
 - Assessment of the Effectiveness of Collaboration in E-business and/or a new buying model
 - Applications of Internet of Things (IoT) in Hong Kong and/or China Industry
 - A Study of Supply Chain Management Effectively Applied in a Company in China with Good Performance
 - Performance Measurement in Global Supply Chain of a Manufacturing/Engineering Company
 - Collaborating with Innovative Suppliers for New Products in Engineering Business
 - A Study of the Implementation of Six Sigma/Lean Six Sigma in Chinese Companies
 - The Application of IoT Concepts in the SMEs Companies
 - A Case Study of Strategies of One-Belt, One-Road Operations in China
 - Implementation of Change Management in Traditional Chinese Medicine Companies
 - Development of a Service Quality Program in Logistics Companies
 - A Case Study of Applying WMS and/or New ERPs in SMEs
 - A Comparative Analysis of the Development of Electric Automotive Companies
 - A Study of Sustainability Development in Operations in Companies in China
 - An Approach to Apply Automation and/or Upgrading Strategy for a Company in China
 - A Study of Global Supply Chain Collaborations in Manufacturing Companies
 - A Review of 3D Printing & its Applications in Manufacturing Industry
 - A Study of Applying Change Management in Manufacturing Companies in China
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Name: Albert H. C. Tsang (Dr.)

Position: Visiting Lecturer, IGDS

Academic Background: BSc (HK), MASc (Tor), MSc (HK), PhD (Tor), CEng, MIIE, MIEE, MASQ, MHKIE, FHKSQ

Research Areas: Quality & Performance Management, Quality and Reliability Engineering, Maintenance Decision Analysis

E-mail: albert.tsang@polyu.edu.hk

Suggested Project Topics:

- Optimizing Replacement Decisions in Fleet Management
 - Optimizing Maintenance / Replacement Decisions in Physical Asset Management
 - Cost–Benefit Model for RFID Investments in Retail Supply Chain
 - A Research on Smart Shopping Mall Using IoT and Digital Technologies
 - Restructuring Business Ecosystem via Omni-Channel Banking
 - Enhancing Customer Services through Artificial Intelligence and Virtual Assistant
 - Big Data for Omni-Channel Supply Chain Management
 - Mobile Workforce Management System Using IoT Technology
 - Design and Development of an M-Health Monitoring Platform Based on IoT and Cloud Computing for Elderly Homes Application
 - Design of an Accurate and Efficient Chinese Part-of-speech Tagging Algorithm
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IGDS Academic Supervisor List

Name: Paul T.W. Tsui (Dr.)

Position: Visiting Lecturer, IGDS

Academic Background: MSc (E-commerce & Internet Computing)(HKU), MSc(Industrial Automation) (PolyU), MSc(Information Systems)(PolyU), MBA (UEA), PhD (UniSA), Chartered Electrical Engineer, Chartered Marketer

Research Area: Innovative customer relations technology management, innovative healthcare technology management, marketing and new product development

Phone: 91994562 / 92858351

E-mail: paultw.tsui@polyu.edu.hk / paulpaulmofo@gmail.com

Suggested Project Topics:

- Engineering, business and management projects
 - Manufacturing management projects
 - Supply chain management
 - Internet and e-business projects
 - Project and program management
 - Innovation management and customer relationship management
 - Topics suggested by students etc.
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