# Business Core for Bachelor of Business Management (BBM)

1. **OPIM 101 Decision Analysis**

   The objective of this course is to introduce students to decision analysis, which is the application of the scientific method to managerial and personal decision-making. Selected decision analysis tools will be introduced to help making decisions in certain and uncertain environments, such as linear and integer programming and decision trees. The usefulness of these tools will be illustrated through examples drawn from all functional areas of business. These example applications include capacity and inventory management, portfolio management, supply chain management and project scheduling.

   **Instructors**
   - Onur BOYABATLI (Course coordinator)
   - Marcus ANG
   - Setu CHOKSHI
   - Pascale CRAMA
   - LI EW Sing Loon
   - LOW Chee Seng
   - Joyce LOW
   - Sharafali MOOSA
   - Radhakrishnan NAIDU
   - Daniel ZHENG

   **No. of Sections**
   - 30-35 per year, 13-18 per term

2. **OPIM 201 Operations Management**

   Companies produce and deliver goods or services to meet customer demand through various operations. In this course, students discover how the operations of any organization can be designed, analyzed and improved to lift its performance, whether the organization is a bank, a hospital, a resort, a manufacturing plant, or a fashion retailer. The course reveals how operations management skills can be used to reduce costs, lower inventories, cut waiting times, improve quality, enhance service levels, and increase revenues and company profits. Specifically, students will gain practical knowledge of process analysis and design, demand forecasting, capacity planning, workflow planning and control, inventory management, quality management, and lean operations. With a focus on the basic concepts that govern operations management, the course also provides the necessary foundation to pursue further development in business management.

   **Instructors**
   - WEE Kwan Eng (Course coordinator)
   - Buket AVCI
   - FANG Xin
   - KOH Niak Wu
   - LIM Yun Fong
   - LOW Chee Seng
   - YANG Kum Khiong
   - Helen ZHOU

   **No. of Sections**
   - 25-27 per year, 11-13 per term
## Operations Management Major’s Compulsory Courses

1. **OPIM 311 Service Processes**
2. **OPIM 321 Supply Chain Management**

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| OPIM 311 Service Processes        | This course explores the dimensions of successful service firms through the use of case studies and lectures. It prepares students for enlightened management and suggests creative entrepreneurial opportunities. Outstanding service organizations are managed differently than their "merely good" competitors. Actions are based on totally different assumptions about the way success is achieved. The results show not only in terms of conventional measures of performance but also in the enthusiasm of the employees and quality of customer satisfaction. Beginning with the service encounter, service managers must blend marketing, technology, people, and information to achieve a distinctive competitive advantage. As the service sector is the fastest-growing sector of the economy, this course is also intended to help students discover entrepreneurial opportunities. | • Marcus ANG  
  *(Course coordinator)*  
  • Rowan WANG                        | 6-7 per year, 3-4 per term |
| OPIM 321 Supply Chain Management  | Matching supply with demand is a primary challenge for a firm: excess supply is too costly, inadequate supply irritates customers. Matching supply to demand is easiest when a firm has a flexible supply process, but flexibility is generally expensive. In this course we will learn (1) how to assess the appropriate level of supply flexibility for a given industry and (2) explore strategies for economically increasing a firm’s supply flexibility. Lastly we will study coordination and incentives across multiple firms in a supply chain. While tactical models and decisions are part of this course, the emphasis is on the qualitative insights needed by general managers or management consultants. We will demonstrate that companies can use (and have used) the principles from this course to significantly enhance their competitiveness. | • Shantanu BHATTACHARYA  
  *(Course coordinator)*  
  • LOW Chee Seng                    | 6-7 per year, 3-4 per term |
## Operations Management Major’s Electives

1. **OPIM 313 Project Management**
2. **OPIM 314 Logistics and Transportation Management**
3. **OPIM 318 Sustainable Operations**
4. **OPIM 319 Operations Strategy: Principles and Practice**
5. **OPIM 322 High Performance Warehousing and Fulfillment**
6. **OPIM 325 Sales and Operations Planning**
7. **OPIM 331 Computer Simulation**
8. **OPIM 340 Retail Operations**
9. **OPIM 341 Procurement and Strategic Sourcing**
10. **OPIM 342 Operational Risk Management**
11. **MGMT 317 Managing Process Improvements**
12. **MGMT 319 Management of Product Development and Innovation**

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| OPIM 313 Project Management | This course aims to provide students with a sound understanding and knowledge of basic concepts and analytical skills critical to effective project management in any industry. The students will acquire a range of “soft” skills (behavioral) and “hard” (analytical) tools and techniques, and learn how to link theory to real-world projects. Topics covered include project selection, initiation, planning, implementation, control and evaluation. With the project life cycle in mind, topics such as the role of the project manager and organization, scheduling and resources allocation will also be covered. | • Pascale CRAMA  
• Sharafali MOOSA | 3-4 per year |
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| OPIM 314         | **Logistics and Transportation Management**  

Transportation forms an integral part of a global supply chain system where business competition requires companies to design products for international markets, and rationalize their purchasing, production and distribution options. Transportation contributes and increases the values in the chain by performing the "moving" functions in the physical distribution of products. This course explores the business issues in the design and operations of transportation systems and underlines their strategic importance to firms. It discusses the core concepts and terminologies of road, air, rail and sea transportation, as well as, the role of international sourcing and logistics in contemporary supply chain management. When introducing the operational aspects of international logistics, the course also highlights the essentialities of international payment, documentation and insurances. | • Joyce LOW          | 2-3 per year   |
| OPIM 318         | **Sustainable Operations**  

The objective of this course is to study how a company can use its operations to improve environmental performance and contribute to business success at the same time. Companies such as Nike, HP, Unilever and Coca-Cola have started to reap the benefits from building sustainability into their operations. A focus on reducing environmental impact not only allowed these companies to comply with increased regulations but also to reduce their costs, to improve the quality of their products and to enhance the reputation of their brands. Students will learn how citizens, governments, customers and employees are creating pressures for more sustainable development and how operations managers are responding to these pressures with waste reduction, pollution prevention, and product stewardship. Students will also study specific tools and methods such as environmental management systems, life cycle analysis, green buildings, green purchasing, design-for-environment, recycling, remanufacturing, servicization and industrial symbiosis. Through the course students will also learn how to craft a successful strategy for sustainable operations by incorporating it into a company’s business strategy, improvement planning, product and process design, supply management, risk management and both internal and external reporting systems. | • Lieven DEMEESTER   | 1 per year     |
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| OPIM 319  
*Operations Strategy: Principles and Practice*                              | How did ZARA become one of the fastest growing and most profitable brands in fashion retailing? How did Wal-Mart grow to be the world's largest retailer? To a large extent the answer is that ZARA and Wal-Mart view their operational capabilities as an important and integral part of their competitive advantage. As do other successful companies, such as Procter & Gamble, Toyota, and Coca Cola, they invest strategically in physical plants and facilities, in process and information technology, in employee, supplier, and distributor relationships, and perhaps most importantly, in organizational practices and know-how. The objective of this course is to provide students with a set of qualitative frameworks and quantitative tools to analyze and guide the long-term, strategic decisions for a company’s operations function. The course is recommended for those interested in consulting, general management, or operations careers, but also for finance specialists interested in assessing the risks, the opportunities, the competitive advantage, and ultimately the value embedded in a company’s operations. | • Lieven DEMEESTER  
• Subrata PAL                                                                                             | 1 per year                                                                                                     |
| OPIM 322  
*High Performance Warehousing and Fulfillment*                                   | As the world becomes more globalized many companies achieve competitive advantage by paying substantial attention on effective supply chain design and operations. Warehouses are consolidation hubs of various products in a supply chain. To support business that covers a wide range of markets it is common for a warehouse to store thousands of products. These products pass through the warehouse in huge volume daily, and so it is important to run the warehouse efficiently. Besides the traditional storage function, warehouses are increasingly forced to perform responsive and accurate customer order fulfillment and other value-added services. High performance in product warehousing, order fulfillment, and value-added services becomes crucial to the success of many companies in today’s competitive business environment. We will introduce various operation models that are theoretically appealing and practically feasible. Some case studies will also be discussed. This course is especially useful for those who are interested in consulting careers in supply chain management and logistics. | • LIM Yun Fong                                                                                               | 1-2 per year                                                                                                   |
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| OPIM 325          | **Sales and Operations Planning**  
Planning is an essential element in today’s complex and high variability supply chains. Global leaders such as, Apple, Walmart, P&G, and Toyota understand this, and are able to bring their entire organizations into an integrated planning and execution mode. Sales and Operations Planning (S&OP) is an approach for establishing such an integrated framework and has emerged as an essential top management tool.  
This course is integrative and practice-oriented. It integrates concepts in business planning, demand and supply planning, design, IT and change management. A wide array of business cases, real life examples and role play-based learning will be used to cover the state-of-the-art practices in S&OP. Capabilities of best practice systems such as SAP, Oracle, i2, etc., and impact of ‘Big Data’ on planning will also be provided as added insight. This course is highly recommended for students keen on taking on consulting, general management, and operations and sales careers. | • Kaushik Ghatak    | 1 per year      |
| OPIM 331          | **Computer Simulation**  
Computer simulation is a popular tool used by managers to analyze and understand complex systems. These systems can be an existing or a proposed facility that is too complex for traditional analytical tools. In this course, students will learn how to model business systems using commercial simulation software and to analyze and interpret the results.  
This is a computer simulation programming course. Students are taught simulation through practices by building simulation models. The instructor will build and review some simulation models in class. Students are then expected to build their own simulation models. The success of this course will depend on the student’s personal involvement in making simulation a reality. | • YANG Kum Khiong   | 1 per year      |
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<td>OPIM 340</td>
<td><strong>Retail Operations</strong>&lt;br&gt;This interactive course studies the important and complex field of retail operations, focusing on the analytical aspects of retail management. As global retailers seek to expand in Asia, there is an urgent need for managers with a strong analytical foundation in operations and an understanding of the cultural aspects of the region. Singapore is undeniably a retail powerhouse, offering a plethora of international brand retail outlets, complemented by distinctive boutiques highlighting regional designers. However, the Internet and social media have redrawn the battlelines in retail, forcing companies to scramble to keep ahead in the highly competitive and volatile global markets. The retail industry drives innovations in operations as retailers compete globally for increasingly discriminating customers and as the supply chain is stretched across continents. This course facilitates students in learning about retail operations in the Singapore context. Cases and Articles cover Department Store Retail, Grocery Retail, Luxury Products, Apparel Retail, Jewellery Retail.</td>
<td>• Bharani KRISHNAN</td>
<td>1 per year</td>
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<td>OPIM 341</td>
<td><strong>Procurement and Strategic Sourcing</strong>&lt;br&gt;In today’s increasingly competitive and globalized world, firms are trying to find ways to improve their performance and differentiate themselves from their rivals. Clearly, suppliers can have great impact on a firm’s total cost and help in this differentiation process. Increased levels of outsourcing and offshoring make correct selection of suppliers and their quality, along with development of relationships between suppliers and producers, more crucial than ever. Whatever the supplier provides, the effective organization needs a robust system to procure the correct goods and services at the best possible price for the organization. Once the organization has made the decision to procure goods and services from another organization, both organizations must clearly define the parameters of the relationship. This course aims to provide students with an understanding of the impact that sourcing and supply management has on the success and profitability of firms in today’s business environment. This course will expose students to concepts and principles in strategic sourcing as pursued by leading edge firms. It will generate student interest in pursuing sourcing as a viable</td>
<td>• KOH Niak Wu&lt;br&gt;• Visiting Professor</td>
<td>1-2 per year</td>
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<td>OPIM 342</td>
<td>All organizations bear operational risks in order to achieve their objectives. Operational risk is defined as the risk of loss from operation failure. Compared to other types of risk, such as credit, underwriting, and innovation risk, operational risk is perhaps the most fundamental and significant one. Why? Operational risk is highly asymmetrical in nature, because of the potential for very large losses due to extreme events (though these are usually few in number). Precisely because extreme events are so rare relative to other risk types, they are very difficult to assess. For organizations motivated by profit, a net positive return is required by shareholders. Operational risk therefore is a key concern of both internal and external stakeholders. The course will give students an overview of which operational risks are prevalent in various industries and what tools and techniques can be used to identify, quantify and control operational risks. Besides learning the basics of probability and statistical theories, students will become familiar with the risk analysis framework and will conduct a risk analysis using either Oracle’s Crystal Ball software or @Risk from Palisade. Students will also be introduced to various regulatory requirements.</td>
<td>• Setu CHOKSHI</td>
<td>1-2 per year</td>
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<td>MGMT 317</td>
<td>All firms have processes, most of which can be improved or optimized. Some of these processes include innovation, development, manufacturing, services, internal and external processes. The ability of managers to define, measure, improve and control processes is a key skill set and, combined with leadership, can enhance the success of a firm. In this course, students will develop a practical understanding of</td>
<td>• Lieven DEMEESTER</td>
<td>1-2 per year</td>
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<td>• Adel DIMIAN</td>
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<td>MGMT 319 Management of Product</td>
<td>appropriate tool use and project management skills to effectively change and improve important processes. Students will also gain a strong theoretical and practical understanding of six sigma deployment and will achieve “Greenbelt” certification (recognized by the industry). Students will learn the DMAIC methodology (Design, Measure, Analyze, Improve, Control) and apply it in real projects. These projects will be sponsored by local SME’s and MNC’s.</td>
<td>• CHAN Kay Min</td>
<td>1 per year</td>
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<td>Development and Innovation</td>
<td>For almost all organisations it is important to their long term survival to innovate in their product or service portfolio, or in the way they organise their processes. Innovation is often a continuous process. Sometimes organisations can come up with a breakthrough product, but more often innovation is about a continuous sequence of smaller improvements, recombining existing technologies in a new approach and re-positioning of existing solutions in new business models, all that to enhance the value proposition for the customer in a significant way.</td>
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<td>Innovation and product development require creativity and imagination, but also hard work in the form of project management under uncertainty, improving the productivity of R&amp;D, finding the best way to organise for speed and quality of the development cycle, profit management, etc. Being an innovator requires talent. This course will not transform you into an innovator, but will help to hone your skills in managing the product development and innovation process. It will give an introduction on how organisations manage the process of innovation and how they can develop successful products, services and systems. The focus will be on innovation and product development in existing organisations. While we may touch on the topic of corporate entrepreneurship, this course is not about the start-up of new companies, nor is it a course on marketing of new products.</td>
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<td>The course is most valuable for those who want to go work in industrial firms or consulting.</td>
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