

Sample List of Courses offered by the College of Professional and Continuing Education (PaCE College)

<p>GC0001: Introduction to Sustainability: Multidisciplinary Approaches and Solutions</p> <p>This course is an introduction to sustainability presented in six modules by six different disciplines, as represented by NTU's schools and centres. Topics covered include:</p> <ol style="list-style-type: none"> 1. The ecological basis of the natural environment from a regional and planetary perspective. 2. Key requirements and constraints for social development and survival, including energy, water, and the built environment. 3. The intersection of economic markets and financial systems, both from the perspective of driving growth and consumption, as well as playing a role as incentives for positive change. 4. The political economy framework of global and regional sustainability challenges. 5. The interaction and connectedness between the various single disciplines and themes. <p>Jobs: Sustainability Executive</p>
<p>EE2004: Digital Electronics</p> <p>This course introduces students to digital fundamentals, including digital circuits, combinational and sequential logic principles and programmable devices. By the end of the course, students will be able to design and construct simple digital electronic systems.</p> <p>Jobs: Electrical Design Engineer, Circuit Engineer</p>
<p>EE2008/IM1001: Data Structures and Algorithms</p> <p>In this course students will learn the fundamental principles of algorithm analysis and design techniques. Students will also learn about data structures, like graphs, that are fundamental for working with structured real world data.</p> <p>Jobs: Data Analyst, Software Engineer, Developer</p>
<p>ET 0001: Enterprise & Innovation</p> <p>The course will be delivered online, which will include lectures, survey assessment, real-life examples, supplementary materials, and recommended readings. It aims to provide students with a basic appreciation of the key concepts of enterprise and innovation. The course content will empower students to gain practical insights on the relevance of enterprise and innovation in their lives by introducing them to the enterprise and innovation ecosystem of the University, the Singapore society, and beyond.</p> <p>Jobs: Entrepreneur, Business Development Executive, Strategic Planner, Relationship Executive</p>
<p>AB1201: Financial Management</p>

The objective of this course is to provide students with a broad understanding of all the important financial principles, concepts and analytical tools. This is a first-year course that provides a good understanding of the various financial aspects of a corporation. These include the understanding and analysis of financial statements, fundamental concepts such as the time value of money, risk and return, corporate financing choices and investment analysis, and financial risk management.

Jobs: Financial Executive, Financial Analyst, Accounting Executive

BG3105: Biomedical Instrumentation

Biomedical Instrumentation focuses on how electrical equipment can measure physiological patient data and improve medical care. This course introduces biomedical instruments and their working principles. It will cover key topics such as the basic concepts of medical instrumentation, basic sensors and transducers, amplifiers and signal processing, and basic physiology related to each measurement.

Jobs: Biomedical Engineer, Biotechnology Engineer

BS3005: Advanced Molecular Genetics

This course provides students with the knowledge of key experimental techniques involved in modern molecular genetic studies. It covers key concepts and experimental techniques, including DNA manipulation, modification of mouse genome, generation of embryonic stem cells with engineered genome, the study of epigenetics, and the use of different model organisms to study human genetic diseases.

Jobs: Research Technologist, DNA Analyst

MS4014: Nanomaterials: Fundamentals and Applications

Nanomaterials are increasingly important in healthcare, electronics, cosmetics and other areas. This course provides an introduction to nanomaterials, including size effects, the properties and applications of nanomaterials, synthesis methods, the stabilisation and assembly of nanomaterials, and how nanomaterials are characterised. Students will also explore existing & emerging applications through case studies.

Jobs: Chemical Engineer

For more information about the programmes offered by NTU's College of Professional and Continuing Education, please visit: to www.ntu.edu.sg/copace