network security, intellectual property, etc. Practical knowledge on business applications such as spreadsheet, database and web portal management software will also be stressed.
http://ge.hkbu.edu.hk/course/GCIT-1005/

GCIT 1006 IT for Success in Everyday Life and Work (3,1,2)
This course aims to prepare students for the challenges of their everyday life and work by equipping them with practical knowledge and skills to engage in fast-moving information technology. Its main thrust is the incorporation of essential forward-looking IT concepts illustrated with real-world examples and coupled with hands-on experiences in the support of problem solving and creative application of IT.
http://ge.hkbu.edu.hk/course/GCIT-1006/

GCIT 1007 IT and Digital Media (3,1,2)
Due to the advancement of information technology, more traditional media, like photo, music, movie, etc, have become digital and some also contain interactive elements like computer games. Digital media even change our daily experience, like the way of advertising. This course aims to introduce the key IT concepts behind different digital media, explain the proper use of IT to better manage them, as well as how the evolution of digital media affects different aspects of our daily life. This course also aims to introduce various digital media software tools and let students experience the content creation of various digital media.
http://ge.hkbu.edu.hk/course/GCIT-1007/

GCIT 1015 IT Innovations Shaping Our World (3,1,2)
This course aims to equip students with knowledge on the key IT innovations that are shaping our world, including the latest development of digital media technology, the advancement of digital communication technology, and the development of smart IT systems, for digital media technology, this course covers latest standards and basic scientific principles of digital imaging, digital TV and digital music, this course also introduces the key of IT innovations in telecommunications and wireless technologies.
http://ge.hkbu.edu.hk/course/GCIT-1015/

GCIT 1016 Life-long Learning with Information Technologies (3,1,2)
This course is designed to develop students' understanding about the theories behind various IT-supported learning strategies. It focuses on the enhancement of learning by adopting a variety of IT-supported learning strategies. With both theoretical and practical components, this course aims to enable students to explore their individual learning style and consequently develop their own learning methods with the appropriate use of technologies to cater for their study needs in university settings and for life-long learning.
http://ge.hkbu.edu.hk/course/GCIT-1016/

GCLA 1005 大學中文 University Chinese (3,2,1) (C)/(P)
本課程共有三個教學單元：一、書面表述要則；二、說明篇章讀寫；三、議論篇章讀寫。
單元一：1) 句子結構分析；2) 書寫清通語段；3) 辨識文辭正誤。
單元二：1) 說明名篇賞析；2) 說明方法及應用；3) 撰寫說明篇章。
單元三：1) 議論名篇賞析；2) 議論方法及應用；3) 撰寫議論篇章。
This course comprises three teaching and learning units: 1) Essence of written expression; 2) Expository reading and writing; 3) Argumentative reading and writing.
Unit 1: 1) Analyzing Chinese sentence structure; 2) Producing concise writing pieces; 3) Identifying ungrammatical expressions.
Unit 2: 1) Analyzing selected expository masterpieces; 2) Applying expository techniques in verbal expressions; 3) Writing an advanced expository essay.
Unit 3: 1) Analyzing selected argumentative masterpieces; 2) Applying argumentative techniques in verbal expressions; 3) Writing an advanced argumentative essay.
http://ge.hkbu.edu.hk/course/GCLA-1005/

GCLA 1008 University English I (3,2,1)
This course aims to enhance students' English language skills in critical reading and listening as well as academic writing.
This course strengthens students' ability to: (1) read academic discourse by engaging in the analysis of the rhetorical and linguistic features used in academic writing; (2) respond critically to ideas through examining and evaluating evidence and arguments; (3) write coherent and structured academic essays by developing core transferable skills in critical thinking, reading, and writing; (4) understand extended academic discourse by employing cognitive and metacognitive lecture comprehension strategies; and (5) use reflection and self-assessment to become a more independent and competent reader, listener and writer.
http://ge.hkbu.edu.hk/course/GCLA-1008/

GCLA 1009 University English II (3,2,1)
This course, as a continuation of University English I, aims to further students' English proficiency in reading and writing to an advanced level, and reinforce the effective use of communicative strategies in English for academic purposes.
This course aims to help students: (1) develop their critical/evaluative reading skills for extensive academic texts; (2) develop skills in writing academic texts including a literature review, and extended essays/argumentative research papers; and (3) develop research skills and conventions of citations and referencing in academic writing; and enhance their oral presentation skills in an academic setting
http://ge.hkbu.edu.hk/course/GCLA-1009/

GCLA 1015 Chinese I 漢語一 (3,3,0) (P)
This course is mainly designed for students whose native language is not Chinese. It aims to teach the four basic skills of language learning in Chinese: listening, speaking, reading, and writing. Students will learn how to read the Chinese Pinyin system, as well as how to read and write Chinese characters. In addition, students will learn how to converse in daily life situations, learn how to read simple passages, and learn the basics of grammar, as well as learn how to write characters and simple sentences.
http://ge.hkbu.edu.hk/course/GCLA-1015/

GCNU 1005 Beating the Odds (3,3,0)
This course begins with a list of well-selected and counterintuitive examples to help students become aware of the existence of mathematics in every aspect of our lives. Chance plays a huge part in life; one will have a better management of risk and opportunities and hence higher odds to become a winner in life if he knows more about how probability works. Rather than focusing on calculating a few specific combinations or permutations, which are tiresome and tedious to most, this course uses real-life situations as incentives and utilizes mathematics as a tool to figure out the "Best Bet" in some everyday problems. Casinos and games are topics commonly seen in probability; after equipping students with the knowledge necessary for identifying the "Best Bet", we move on to a very practical problem—knowing that the chance of winning is 99.9%, how much should we invest on this "Best Bet"? Our investigations (not the formulas and calculations) are then extended to cover more real-life situations in which its odds cannot be predicted by counting techniques. Students will discover new ways of expressing known information, connecting reality to math, applying meta-tools to predict chances, and making statistically-justifiable decisions.
http://ge.hkbu.edu.hk/course/GCNU-1005/

GCNU 1006 Discovering Hong Kong by Statistical Software (3,3,0)

This course serves as an introduction to statistical analysis, engaging basic descriptive statistics and advanced regression models. Students often memorize the relevant equations and symbols without understanding the reasoning and motivations behind them, which is not a student-friendly approach to learning statistics. Here, we skip all of the hard statistical ideas in distribution, formulas or calculus, which differs from traditional courses targeting major-students. Rather, this course is concerned with the logical processes involved in obtaining answers. Statistical software is useful in helping students grasp the underlying concepts involved. Students are able to follow the appropriate steps and engage with the innovative pedagogy. This course uses examples from real-life situations and local data, rather than complicated calculations, to guide students in building a strong foundation in statistical thinking, which enables them to develop problem-solving techniques and to criticize statistical arguments. This course can also open up a window into the use of statistics, which will encompass not only simple descriptive statistics, but also other influential methods including statistical tests. Ultimately, students will conceptually come to know more about statistical tests than their mouse-clicking counterparts.
http://ge.hkbu.edu.hk/course/GCNU-1006/

GCNU 1007 Estimating the World (3,3,0)

This course begins by introducing the motivations behind why we need to estimate. While simple estimations can be done easily with pen and paper, more complicated ones will require the help of modern computing algorithms. To become proficient in computing, students will learn the differences between familiar mathematical operators (i.e. addition, subtraction, multiplication and division) and operations (i.e. square root and exponential), as well as the corresponding operators and operations built into computers. Equipped with the "computational senses", students (who are assumed to have no previous exposure to calculus and linear algebra) will be introduced to several carefully selected numerical methods applicable to real-life applications, which are simulated with the aid of the popular mathematical software MATLAB. Similar to how today's researchers approach research topics and handle newly invented algorithms, we will adopt a step-by-step investigative experimental approach instead of a theoretical one. This course will guide students to experience and understand the essence of estimation via computing by building links to several basic mathematical ideas, such as sequences and limits. Although numerical methods covered in this course are limited, their applications to real-life problems are not. This course aims to transform the next generation of citizens in Hong Kong from a fact-consumer into informed question-asker, with topics such as, "How can I estimate the Gini index for Hong Kong using basic facts and data?", "How polluted is the air inside the cross harbor tunnel?" and "Taking inflation into account, is the cost of raising a child in Hong Kong really $4 million?" Under this course, logical thinking and scientific reasoning combined with hands-on experiment will allow students to verify the trustworthiness of quantitative estimations reported in the news and its impact on daily life.
http://ge.hkbu.edu.hk/course/GCNU-1007/

GCNU 1015 Manage Your Money without Formulas (3,3,0)

This course begins with an introduction to different types of interest arisen in e.g. savings, student loans, credit cards, mortgages and life insurance policies, followed by basic growth models and the more complicated annuity models commonly found in Hong Kong. An EXCEL Tutorial will also be included in order to introduce the computer skills needed to model and solve problems using EXCEL spreadsheets. We will also cover more advanced ideas including forecasting trends in interest rates, estimating the market-price behavior, and carrying out simulations. This knowledge will allow students to select the best deals from the overwhelming number of plans offered by Hong Kong financial institutions. Local examples not only provide a sense of familiarity for students, but also make the skills acquired in this course applicable to Hong Kong situations. These examples will help build a strong foundation in logical thinking and problem solving and enable students to use cost-benefit analysis as a decision-making tool in their daily lives. We hope this course will help students learn to enjoy using mathematics in real life.
http://ge.hkbu.edu.hk/course/GCNU-1015/

GCNU 1016 Mathematics Around Us (3,3,0)

This course aims to "make sense" of the mathematical topics Hong Kong students spend years to learn (mainly for examinations). Although the compact syllabus in high school makes good use of students' golden learning years to improve their calculation skills, the standalone and often unrelated topics can result in a lack of connections and linkages to real-life. Students may wrestle with abstract mathematical concepts and robotic calculations that appear to be unpractical. To change the already-frustrated students' view towards mathematics and allow them to enjoy and benefit from mathematics, a deeper understanding of both the foreground (i.e. real-life applications around us) and background (i.e., motivation and origin) must be provided. Don't let years of efforts end in vain! This course begins with the mathematical logic in our daily conversions. This practical opening provides students a sense of familiarity and allows them to gradually see the usefulness of mathematics. To answer a common question from students, "Why am I learning this?", The interconnections between high school geometry, trigonometry functions (i.e. sin, cos, and tan), Pi, nature numbers, and complex numbers will be built from a historical and practical point of view. The applications of these high school topics in daily life and beyond will also be presented, in the hopes that they may capture students' imaginations.
http://ge.hkbu.edu.hk/course/GCNU-1016/

GCNU 1017 Mathematics of Fairness (3,3,0)

This course begins with an introduction to the way in which statistical information can be used to interpret and affect election phenomena and other everyday issues. Students will learn a number of election systems and address the problem of finding the best decision-making procedures. Moreover, a variety of possible methods of electing our future Chief Executive are investigated (although we cannot promise you that he or she will ever be elected through universal suffrage). After equipping you with the knowledge of different electoral systems, we then introduce you to the weighted voting system, in which voters may be treated unequally. Next, the course turns to an investigation of a number of simplified but real-life cases, such as the distribution of seats in the Legislative Council of Hong Kong. Finally, we address the mathematically well-known cake-cutting problem, which is formally known as the fairness problem. You will find the answer to many fairness-related questions in this course.
http://ge.hkbu.edu.hk/course/GCNU-1017/

GCNU 1025 Numbers Save the Day (3,3,0)

Numbers play numerous roles in our everyday lives. They are used to describe the natural world, to communicate information, and to model important daily applications. This course begins with a simple math topic: "integers 1, 2, 3,…" and guides students through its important (unknown to most) properties and everyday applications. After a reminder about the basic properties of numbers, besides the obvious example of telephone numbers, students will begin to see the how "features" can be hidden within, say, our HKID number. From "fun to know" to "extremely important" applications, topics will range from such things as the composition of digital pictures and photo-touching software to security that helps us assess the risk of everyday online transactions (which is based completely on "numbers"). With a newfound awareness of "numbers" around them, students can make sense of many more things in their daily lives. We hope that this course will help students see the many diverse applications of mathematics and what makes it all possible.
http://ge.hkbu.edu.hk/course/GCNU-1025/

GCNU 1026 Smart Decisions (3,3,0)
This course focuses on finding the best way to solve a given problem—the so-called operations research, management science, or optimization methods. We begin with a walk-through to help students see the hidden mathematics, or mathematical model, behind seemingly unrelated real-life situations, such as, "What is the quickest way check out a shopping mall or a tourist area?" While small-scaled problems can usually be solved by intuition or trial-and-error, a logical and systematical approach must be used to tackle the large-scaled ones. One of our main goals is to generalize the concept of "function" learned in high school and extend its applications to real-life problems. Students will learn that functions can take in different inputs other than real numbers; for examples, the route one decides to go around in the shopping mall is an input. Identifying the appropriate "function" is highly situational-dependent which is exactly where students can build the connections between real-life and mathematics. Instead of presenting cookbook-procedures as is (which we find dull, meaningless, and inflexible), we will help students understand all motivations behind the solution process; say, "How hard is the problem really?" For difficult ones (even with today's speedy computers), it makes sense to go with the second-best or near-optimal approach than insisting on having the "best" way. We hope that this course will help students getting used to "practical-mathematics" and benefit from doing so in their future career achievements.
http://ge.hkbu.edu.hk/course/GCNU-1026/

GCNU 1027 Speaking of Statistics (3,3,0)
This course begins with an introduction to different ways to interpret data in a proper statistical sense or misinterpret data with unjustifiable arguments. Misuse of statistical claims and data are not at all uncommon in Hong Kong. To become a smart consumer or citizen, we must not blindly believe in everything we are being told. Even though not everyone is trained to be a statistician or a scholar (which is not what we aim to do either), having some overall idea about how statistics works helps us be aware of the phony statistics around us and remain doubtful about the credibility of various claims. This course uses real-life examples to help students build a strong connection between the presented materials to the real world. We go easy on calculations; it is more important to understand "What are we doing?" and "Why are we doing this?" than the actual calculation (which is mostly done by computer software nowadays). By having the full picture in sight, students can see why a "statistically significant" discovery can be unimportant or even irrelevant—which is commonly used to trick people who "think" they understand statistics. We hope that this course will help students strengthen and apply their logical thinking skills effectively to their reading (i.e. by identifying the suspicious data), writing (i.e. by producing honest self-favorable data), and future learning (i.e. by extending the critical skill to other fields of study).
http://ge.hkbu.edu.hk/course/GCNU-1027/

GCNU 1035 Introduction to Spatial Numeracy (3,2,1)
The course will teach students mathematical concepts and tools for measuring space, location and spatial relationships in terms of distance, direction, location, size, area, etc. These include plane and spherical geometries such as coordinates, latitude, longitude, Euclidean and great circle distances, etc. The course will also introduce basic quantitative spatial models and tools for mapping, positioning and navigating, for examples Google Earth, Geographical Information Systems and Global Positioning Systems, and satellite images.
http://ge.hkbu.edu.hk/course/GCNU-1035/

GCNU 1036 Business Numeracy (3,3,0)
Taking you clearly and concisely through numerous fundamental functions, both elementary and advanced, this course arms you with the tools necessary to not only approach numbers with more confidence, but also solve business numeracy problems more easily, analyse information more accurately, and make decisions more effectively. Quantitative writing assignments (e.g. understanding how economic indicators, market share, market price, share prices, financial ratios, volume of units produced, profit margins, cost of living indexes, supply and demand statistics have impacts on the business environment) in this course will not only enrich students' computational ability, but also provide an adventure for students to explore, to deduce and to draw conclusions based on numerical or other quantitative evidence.
http://ge.hkbu.edu.hk/course/GCNU-1036/

GCPE 1005 Badminton (1,2,0)
This course aims to acquaint students with the basic rules, knowledge, as well as the basic motor skills of badminton. It also provides students with an understanding of the principles of a healthy lifestyle and means to apply fundamental sports science knowledge to analyse and enhance badminton performance. Upon completion of this course, students will be able to perform the basic skills of badminton, apply the offensive and defensive strategies under game situations, and adopt an active healthy lifestyle.
http://ge.hkbu.edu.hk/course/GCPE-1005/

GCPE 1006 Basketball (1,2,0)
This course aims to acquaint students with the basic skills and techniques of basketball. It also provides students with an understanding of the principles of a healthy lifestyle and means to apply fundamental sports science knowledge to analyse and enhance basketball performance. Upon completion of the course, students will be able to perform basketball techniques in shooting, dribbling, passing and catching; understand the competition rules and scoring method; and adopt an active healthy lifestyle.
http://ge.hkbu.edu.hk/course/GCPE-1006/

GCPE 1007 Competitive Sport for People with Special Needs (1,2,0)
This course aims to acquaint students with the knowledge in the work of a selected National Sport Association that offers competitive sport for people with mobility/sensory/health needs. It also helps students acquire knowledge in physiological and psychological effects of the selected sport practised by persons with mobility/sensory/health needs.
http://ge.hkbu.edu.hk/course/GCPE-1007/

GCPE 1015 DanceSport—Latin Dance (1,2,0)
This course aims to acquaint students with the fundamental knowledge and motor skills in Latin Dance of DanceSport. It also provides students with an understanding of the principles of a healthy lifestyle and means to apply fundamental sports science knowledge to analyse and enhance performance of Latin Dance of DanceSport. Upon completion of this course, students will be able to perform the basic routines of the selected types of Latin Dance of DanceSport; and adopt an active healthy lifestyle.
http://ge.hkbu.edu.hk/course/GCPE-1015/

GCPE 1016 DanceSport—Standard Dance (1,2,0)
This course aims to acquaint students with the fundamental knowledge and motor skills in Standard Dance of DanceSport. It also provides students with an understanding of the principles of a healthy lifestyle and means to apply fundamental sports science knowledge to Standard Dance of DanceSport. Upon completion of this course, students will be able to perform the basic routines of the selected types of Standard Dance of DanceSport; and adopt an active healthy lifestyle.
http://ge.hkbu.edu.hk/course/GCPE-1016/

GCPE 1017 Exercise and Sport for People with Special Needs (1,2,0)
The course is offered to students whose mobility/sensory/health needs require special teaching and learning attention. It aims to provide students with an understanding of the benefits of exercise and sport for persons with mobility/sensory/health needs, skills to participate in exercise/sports, and knowledge in selecting and performing exercise and sport.
http://ge.hkbu.edu.hk/course/GCPE-1017/