# Course Code Changes for SY 2022-23

| **Course Title** | **SCED Course Code** | **Course Description** | **Change Status** |
| --- | --- | --- | --- |
| Quantitative Reasoning | 02158 | Quantitative Reasoning courses allow students to apply basic mathematical skills and analytical concepts to real-world situations. These courses focus on strategies required for problem solving, critical evaluation of numerical information, decision making, and economic productivity in real-world applications. Topics may include numeracy, ratio and proportional reasoning, modeling, financial literacy, validity studies (logic and set theory), and statistics. | New Course  Code |
| Mechatronics | 13104 | Mechatronics courses provide students with instruction and experience in mechatronics, a multidisciplinary subject involving mechanics, electronics, control theory, and computer science to design and manufacture products. Mechatronic systems form the foundation of robotics, automation, and advanced manufacturing (such as 3D printing). These courses typically expose students to the theoretical basis of mechatronics in addition to applying these theories to hands-on projects. | New  Course  Code |
| Mathematical Modeling | 02137 | Mathematical Modeling courses build upon students' knowledge of algebra and geometry to analyze information using statistical methods and probability, simulate change using mathematical relationships and spatial and geometric modeling, and critically assess and make decisions or solve problems based on quantitative data and logical reasoning. | **Added Endorsements –** Foundational Math; Legacy Foundational Math |
| Statistics | 02205 | Statistics courses involve the major concepts and methods used to collect, analyze, and draw conclusions from data. Topics typically include populations and samples, measures of central tendency and variability, hypothesis testing, presentation, and making statistical inferences. | **Added Endorsements –** Foundational Math; Legacy Foundational Math |

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| --- | --- | --- | --- |
| IB Mathematical Studies | 02131 | IB Mathematical Studies courses prepare students to take the International Baccalaureate Mathematical Studies exam. Intended to provide students with the skills to cope with the mathematical demands of a technological society, course topics include linear, quadratic, and exponential functions, solutions, and graphs; descriptive statistics; statistical applications; data analysis, including collection, calculation, and presentation of data; set operations, logic, and probability; geometry and trigonometry; mathematical models; and introduction to differential calculus. | Deleted Course  Code |
| IB Mathematics | 02132 | IB Mathematics courses prepare students to take the International Baccalaureate Mathematics exams. Topics include operations and properties of number sets; trigonometric functions, equations, and graphs; algebra and coordinate geometry; simultaneous linear equations; polynomial and quadratic functions and equations; calculus, including bilinear, exponential and logarithmic functions; two dimensional vectors; and statistics and probability. Advanced content may include discrete mathematics; sets, relations, and groups; or additional calculus topics. | Deleted Course  Code |
| IB Further Mathematics | 02134 | IB Further Mathematics courses prepare students to take the International Baccalaureate Further Mathematics exam. Designed to advance students' knowledge of IB Mathematics, course topics include linear algebra; geometry; statistics and probability; sets, relations and groups; calculus; and discrete mathematics. | Deleted Course Code |
| IB Approaches to Learning | 22111 | Obligatory for every International Baccalaureate Career-related Certificate, IB Approaches to Learning courses introduce students to life skills to enable them to engage critically with others. Course topics include ethical dilemmas, deductive and inductive reasoning, culture shock, academic honesty, and emotional intelligence. | Deleted Course Code |