

Appendix E

Course Description

1. General education subjects

1.1 Interdisciplinary subject group

905-105 **Being Ideal STC Graduate** **3 (3-0-6)**

Character, qualifications and core values of the graduates of Siam Technology College, understanding current events and situations, future change awareness, applying knowledge to propose solutions for problem-solving in case studies for your own future benefit and the of societies.

1.2 Social Sciences and Humanities subject group

901-101 **Life Quality and Social Development** **3 (3-0-6)**

Philosophy and ethical principles in living and working, self-concept and attitude; application of Dharma in quality of life and social development; self-responsibility, responsibility towards others and society, self-management and adaptation to constructively participate in social activities, development of interpersonal development, efficiency and effectiveness at work.

901-102 **Society, Economy and Politics** **3 (3-0-6)**

Relation of society, economy, and politics, basic international politics, status and roles of a person in society, influence of group and community on individuals, interconnectedness of changes in society, economy, and politics, analysis of persisting problems and alternatives in problem solving.

901-103 **Psychology for Personal Development** **2 (1-2-3)**

Definition and origin of psychology, effects of genetic, and environmental factors on human behavior, basic physiology, sensation, perception, learning, motivation, emotion, intelligence, personality and adaptation, mental health, human behavior and personal development.

901-104 **Ethics in Everyday Life** **3 (3-0-6)**

Meaning of life, principles of ethics to be used in analyzing and problem solving in the aspect of everyday ethics, process of justice system, solving corruption and the conflicts of professional ethics in different professions, morality, governance, human rights principles and social responsibility.

901-114 **Personality Development** **2 (1-2-3)**

Definition and significance of personality in career and daily lives, psychological theories pertinent to personality, personality assessment, personality development guidelines in

902-142 English Reading Comprehension 3 (2-2-5)
 This course aims to provide students' fundamental reading skills with particular attention on vocabulary development, understanding denotation and connotation, making inferences and judgments, reading comprehension, fluency and interpretation. In addition, the course fosters skills of scanning, skimming and prediction through extensive reading. Crucial analysis skills in relationship to various texts will be introduced.

902-143 English for Careers 3 (2-2-5)
 The use of English in different working situations relating to different careers: getting information, job applications and interviews, business writing, communicating in offices, making appointments, telephone conversations, note-taking, and taking minutes.

902-144 Basic English Writing 3 (2-2-5)
 Fundamental principles of effective writing include grammar, punctuation, sentence structure, and paragraph development. Students will also learn how to plan, organize, and revise their own writing to create clear, coherent, and engaging written communication.

1.3.2 Courses in other foreign language subjects

902-120 Chinese for Communication in Daily Life 3 (2-2-5)
 Development of fundamental listening and speaking skills necessary to basically converse in Chinese in everyday life situations; word choice and intonation appropriate for situations and emotions; fluently and correctly engaged in simple dialogue.

902-122 Japanese for Communication in Daily Life 3 (2-2-5)
 Development of listening and speaking skills necessary to basically converse in Japanese in everyday life situations, adding relevant vocabulary to expand the scope of conversations.

902-124 Bahasa Malayu for Communication in Daily Life 3 (2-2-5)
 Development of communication skills in Bahasa Malayu using more complex grammatical structure, constructing sentences for appropriate communication in Bahasa Malayu.

902-125 Arabic for Communication in Daily Life 3 (2-2-5)
 Alphabets, word composition, pronunciation, simple vocabulary, word order, simple grammatical structure, greetings, and conversation in simple situations.

902-127 Korean for Communication in Daily Life 3 (2-2-5)
 Alphabets, pronunciation, basic greeting in everyday life, basic Korean grammatical structure, simple conversation.

- 902-129 Russian for Communication in Daily Life 3 (2-2-5)**
Basic Russian grammatical structure, phonetics, communication skills, greeting and basic conversation in simple situations.
- 902-131 Lao for Communication in Daily Life 3 (2-2-5)**
Basic Lao grammatical structure, phonetics, communication skills, greetings, and basic conversation in simple situations.
- 902-133 Burmese for Communication in Daily Life 3 (2-2-5)**
Basic Burmese grammatical structure, phonetics, orthoography, communication skills, greetings, and basic conversation in simple situations.
- 902-135 Cambodian for Communication in Daily Life 3 (2-2-5)**
Basic Cambodian grammatical structure, phonetics, communication skills, greetings, and basic conversation in simple situations.
- 902-137 Vietnamese for Communication in Daily Life 3 (2-2-5)**
Basic Vietnamese grammatical structure, phonetics, communication skills, greeting and basic conversation in simple situations.
- 1.4 Science and Mathematics subject group**
- 903-103 Science and Environmental Issues 3 (3-0-6)**
Development of an environmentally friendly attitude; scientific impacts on the environment; global warming; disaster and solution guidelines; appropriate man-environment relationship towards sustainability; advancement of science and technology in solving and preventing environmental problems.
- 903-105 Electrical Energy and Electricity in Daily life 3 (3-0-6)**
Electricity generation, power generation, basic electrical principles, analysis of the electric power situation in Thailand, ASEAN countries, and the world, organizations involved in electric power in Thailand, fuel and energy used to generate electricity, power plants and environmental management, application of electricity for safety, using and saving electricity, planning and calculating household electricity bills, introduction to the electric vehicle.
- 903-107 Resources Renewable Energy and Environment 3 (3-0-6)**
Exploration of concepts of elements and their chemical compositions, precious metals and gem stones, petroleum and its products, the use of energy for transportation, chemical agents conventionally used in industries, basic knowledge of renewable energy, solar

energy, wind energy, geothermal energy, hydropower energy, biomass energy, nuclear energy, environmental impact of energy and management guidelines, ecology and industrial impact on ecosystems, environmental management and conservation guidelines at the industrial level; energy conservation.

903-109 Fundamental Statistics in Everyday Life and Higher Education 3 (3-0-6)

Exploration of basic statistical concepts in making sense of everyday life phenomena and for higher education, interpretation of simple statistical data, statistical methodology, measurement, data management for analysis, basic statistics for research, including mean, standard deviation, measurement of central tendency, measurement of position, measurement of dispersion, sampling, and probability.

903-111 Mathematics in Business World 3 (3-0-6)

Fundamental mathematics for business, interest calculation, depreciation, present value and annuity, mathematics for buying and selling, insurance, decision-making under risk and uncertainty, derivative and integral functions, and application for decision-making in business.

903-115 Creative Thinking and Innovation 3 (3-0-6)

Process thinking, creative thinking, Importance and necessity of innovation, Knowledge management for innovation development, problem solving, applications of creative thinking and innovation to learning living, principles concerning a development of innovation, innovations from variety of applications of knowledge to various issues and situations.

903-116 Living in Digital Society and Digital Literacy 3 (3-0-6)

Study the life patterns in digital society, metaverse, importance of ICT data, access to sources, development of searching and referencing skills, appropriate use of ICT as well as creative presentation. Study the computer crime act and follow with discretion and ethics. Study and practice the process of making content marketing, content strategy, content planning and the process of professionally building the team for creating the content and preparing the media for content producing, the ways to evaluate and report the successful of the content.

903-117 Man, Money and Math in Daily Life 3 (3-0-6)

Study the principles of mathematics related to daily life, understanding and applying this fundamental to have sustainable happiness by focusing on the relationship and the balance of own management on money usage, saving and investment, for instance, saving money, government bonds, stock markets, crypto currency, and other interesting properties, interest calculation, depreciation, present value, and annuity.

- 903-118 General Mathematics for Cognitive Skills 3 (3-0-6)**
 Trigonometry, sets and systems of numbers, sequences and series, linear equations, logic, and the and the application of mathematics in everyday life.
- 903-119 Science and Logical Learning for Future Life 3 (3-0-6)**
 learning in the 21st century; scientific processes; roles of science in STEM; scientific study; differences between different fields of science; technologies and their risks; analytical thinking; problem-solving skills with principles and rationale; and application of problem-solving skills for use in future life contexts.
- 903-120 Observation and Experiment in the Natural and Social Sciences 3 (2-2-5)**
 Observation, measurement, experiment, analyzing results with statistics in science and social sciences, tools used to collect data, quantitative data collection, qualitative data collection, and studying data from case studies.
- 1.5 Physical Education and Recreation Group**
- 904-101 Physical Education and Recreation for Life Quality Development1 (1-0-2)**
 Exploration of concepts of physical education, health promotion through sport activities, selection of appropriate sport activities to promote healthiness, exercise for weight control, exercise for muscle strengthening, exploration of the concept of recreation, recreational activities, leading recreational activities.
- 904-103 Table Tennis for Health 1 (0-2-2)**
 History of table tennis, basic skills and physical fitness, individual and team techniques, rules and regulations, injuries and safety, equipment maintenance.
- 904-106 Basketball for Health 1 (0-2-2)**
 History and development of basketball, basic skills and physical fitness of basketball, individual and team techniques, rules and regulations, injuries and safety, equipment maintenance.
- 904-107 E-sport, Board Games and Strategies of Creation 1 (0-2-2)**
 History of board games and e-sports, game types, benefits and aims of playing games and e-sports, and development of thinking and planning skills through playing games.

2. Special subjects

2.1 Basic professional subject group

161-101 Principles of International Strategic Innovative Management 3 (2-2-5)

Explore the dynamic intersection of innovation and strategic management in this course. Gain a comprehensive understanding of key principles and frameworks that drive successful strategic innovation in organizations. Topics include disruptive technologies, creative problem-solving, competitive analysis, and fostering a culture of innovation. This course integrates theory with real-world case studies to equip students with the tools needed to formulate and implement innovative strategies in today's rapidly evolving business environment.

161-102 Principles of Marketing 6.0 3 (3-0-6)

This course will explore topics such as data-driven marketing, social media strategies, SEO/SEM, mobile marketing, and emerging technologies. Through case studies and hands-on projects, students will gain practical skills to navigate the dynamic digital landscape and drive business growth in Marketing 6.0. This course explores the role of digital technologies in shaping international marketing strategies. Students learn to leverage digital platforms, data analytics, and social media for effective global brand management and market penetration.

161-103 Legal Issues in Global Technology Management 3 (2-2-5)

This course explores legal challenges in global technology management. Topics include intellectual property, data privacy, e-commerce, international trade, and technology management. Through case studies and guest lectures, students gain practical insights to navigate legal complexities in the tech industry.

161-104 Taxation, Innovation and the Global Environment 3 (3-0-6)

Examine the intricate relationship between taxation, innovation, and the global business landscape. This course explores how tax policies influence innovation strategies and the environmental implications of business activities. Delve into international taxation, incentives for innovation, and sustainable business practices. Gain insights into optimizing tax structures while promoting innovation and environmentally responsible business conduct.

161-105 Principles of Information Systems 3 (3-0-6)

Role and use of information systems in supporting business processes and decision-making; collaboration between hardware and software; database systems; systems development; business intelligence; networks and telecommunications; management information systems (MIS); information systems planning; computer network management; internet; competitive edge of information systems.

- 161-206 Financial Accounting in the Digital Age 3 (3-0-6)**
 Discover the transformative impact of digital technologies on financial accounting practices. This course explores how digital tools and data analytics reshape financial reporting, analysis, and decision-making. Learn to navigate the challenges and opportunities presented by the digital landscape while ensuring financial transparency and compliance. Acquire the skills to leverage technology for efficient financial management and reporting in today's fast-paced, data-driven business environment.
- 161-207 Innovative Finance and Technology 3 (2-2-5)**
 This course explores strategies for financing innovation, risk management, International Finance and Trade and capital allocation in dynamic business environments. Topics include venture capital, corporate investment decisions, Tools for managing international financial risk and financial strategies to foster innovation. Learn to balance financial discipline with the imperative for continuous innovation and value creation within organizations.
- 161-208 Statistics for Innovative Decision Making 3 (3-0-6)**
Prerequisite: 903-109 Fundamental statistics in Everyday life and higher education.
 This course provides a practical foundation in statistical analysis, emphasizing its application in guiding strategic decisions and promoting innovative practices. Topics include data-driven decision-making, hypothesis testing, Using R program to make students a better understanding of statistical processes, and predictive modeling. Develop the skills to interpret and communicate statistical findings to support innovation initiatives. Real-world case studies will illustrate how statistical insights can drive informed decision-making and contribute to a culture of continuous improvement and innovation within organizations.
- 161-209 Quantitative Methods in Digital Business Analysis 3 (3-0-6)**
 This course covers statistical methods, data analytics, and modeling specific to the digital landscape. Topics include regression analysis, machine learning, and data-driven decision-making. Develop proficiency in using quantitative methods to extract meaningful insights from digital datasets, optimize processes, and enhance strategic decision-making in the digital business.
- 161-210 International Business Research 3 (2-2-5)**
Prerequisite: 161-208 Statistics for Decision Making and Innovation.
 Learn advanced techniques in research design, data collection, and analysis to fuel innovation. Topics include qualitative and quantitative research methods, trend analysis, and innovation frameworks. Acquire the skills to critically evaluate and apply research findings to drive creative solutions and strategic decision-making. Engage in hands-on projects to cultivate a mindset of continuous improvement and innovation in diverse contexts.

161-311 International Business Management 3 (3-0-6)

Global business environment; international business entry; how businesses work in different regions of the world; practical techniques to support international management; country evaluation; methods of international market entry; market development planning and strategic analysis; knowledge of the role of the internet and e-commerce as tools for international management; problems of multi-national corporations; international economic system.

2.2 Mandatory professional groups

162-201 Innovative Business Policy and Strategy 3 (3-0-6)

This course delves into cutting-edge frameworks and methodologies for formulating and executing innovative business policies. Topics include strategic foresight, disruptive innovation, and agile strategy implementation. Develop a strategic mindset to navigate rapidly evolving markets, foster innovation, and sustain competitive advantage. Case studies and collaborative projects will provide practical insights into crafting and adapting business policies that drive innovation and long-term success in today's dynamic business landscape.

162-202 Effective Project Management and Innovation 3 (3-0-6)

This course blends traditional project management principles with a focus on fostering creativity and innovation. Topics include project planning, risk management, and agile methodologies tailored to innovation projects. Gain practical skills to lead cross-functional teams, manage resources efficiently, and drive innovation initiatives to successful completion.

162-203 Integrating Online Marketing 3 (3-0-6)

Evolution of Marketing 1.0- Marketing 4.0; Basic media planning and budgeting; planning and evaluating online marketing communications; video marketing; content marketing; electronic direct mail (EDM); social media marketing; and types of online marketing channels.

162-204 Business Intelligence and Analytics 3 (3-0-6)

Key methods of predictive business analytics; key areas of business activity; statistical, computational and data management skills, use of required information technology for modern data analysis; characteristics and structures of Business Intelligence; management techniques and the decision-making techniques.

162-205 Economics and International Investment 3 (3-0-6)

Basic theory of economics; Microeconomics and Macroeconomics; Demand and supply; consumer behavior; production costs; profit and loss; Perfect competition and monopoly market; Pricing equilibrium; performance of the economy and future economic

trends; principles of economics in global; aspects for foreign currency exchange rate; Foreign direct investment (FDI); and foreign portfolio investment (FPI) with the globalization of international business.

162-306 Total Quality Management and Business Process Improvement 3 (3-0-6)

Concepts, tools and techniques used in the management and measurement of quality, productivity and competitiveness in an international environment; total quality control and management; employee involvement in quality; team building for quality; relationship between quality, productivity, competitiveness and statistical process control; aspects of increasing efficiency of business processes in the organization; business process from a general management perspective; tools, analytical frameworks and general principles for managing international business processes.

162-307 Cost Accounting for Global Business 3 (3-0-6)

This course provides a comprehensive understanding of cost structures, budgeting, and financial control in an international context. Topics include transfer pricing, currency risk management, and global cost analysis. Acquire the skills to optimize cost efficiency, make informed financial decisions, and contribute to the strategic success of a global business.

162-308 International Human Resource Management 3(3-0-6)

Basic human resource functions such as employment, compensation, benefits, employee relations, manpower allocation, training and development; health and safety; comparisons between human resources management practices across cultures; developments in international human resources management policies and practices; international assignments and employment practices.

162-309 Change Management in International Organization 3 (3-0-6)

Dynamics of leadership and management of change in organizations; characteristics of transactional and transformational leadership; relationships of power, authority and responsibility; leadership effectiveness; leadership style; change strategies; the major theories and perspectives regarding organizational development; creativity and change management; change strategies and interventions; feedback; measuring and repetition processes.

162-310 Global Supply Chain and Logistics Management 3 (3-0-6)

This course covers strategic aspects of supply chain design, logistics, and international trade. Topics include network optimization, risk management, and the integration of technology in supply chain operations. Develop the skills to navigate cross-border

complexities, enhance efficiency, and ensure sustainability within global supply chains. Case studies and real-world applications will provide insights into the dynamic challenges and innovations shaping the field of global supply chain and logistics management.

162-411 Cross-Cultural Management and Organizational Behavior 3 (3-0-6)

Cultures and intercultural communication competence; development of intercultural awareness of cultural patterns of behavior; values and standards; verbal and non – verbal communication; communication management in intercultural organizations; individual and group behavior in organizations; enhance the quality of employees work life.

163-301 Management Accounting 3 (3-0-6)

Prerequisite: 161-206 Financial accounting in the digital age.

Financial statement; data accounting processing for decision making; cost analysis; systems to accumulate, summarize, and distribute financial information; impact of taxes on the firm; planning and control techniques through accounting data and information.

163-302 Performance Measurement and Management Control 3 (3-0-6)

Various types of budgets for managerial planning and control such as cash budgeting, capital budgeting, production budgets; and interrelationship among budgets and cost profit analysis.

163-303 Digital Marketing 3 (3-0-6)

Different functions and applications of the Digital Technologies, technologies change business and consumer practices; impact of business management processes; the use of digital technology in a company's existing marketing mix; uses of technologies for marketing tactics and strategies; search engine optimization; web analytics; video marketing; online advertising; and social media marketing.

163-305 Global Marketing in The Digital Age 3 (3-0-6)

This course examines the role of digital technologies in shaping global marketing strategies. Students will learn how to leverage digital platforms, data analytics, and social media for effective international marketing campaigns.

163-307 Business Negotiation 3 (3-0-6)

Principles and practices of both domestic and international negotiation in the fields of business and trade; bilateral, multilateral and negotiation process; the development of skills in conflict resolution within the organization.

- 163-308** **Financial Reporting and Statement Analysis** **3 (3-0-6)**
Methods and techniques of financial statements analysis for users' decision making; corporate financial statements; short-term and long-term financial plans; working capital management; discounted cash flow techniques; methods for deciding assets' return of investment (ROI) and factors influencing capital structure decisions.
- 163-309** **Management Information Systems** **3 (3-0-6)**
Use of information systems and technology in support of organizational strategy; databases and data management; information networks; the Internet and social media; enterprise resource planning (ERP); e-business; wireless and mobile technology; knowledge management; developing and implementing information systems.
- 163-310** **Leadership and Communication for International Project** **3 (3-0-6)**
Leadership and management guidelines for the project manager in various situations; principles of effective planning, communication, and motivation throughout the project life cycle; principles of project control from initiation through execution to closure in a clear and practical manner.
- 163-311** **Risk Management in Organization** **3 (3-0-6)**
Equips students with the skills to identify, assess, and mitigate risks within an organization. It covers strategies for managing financial, operational, and strategic risks, ensuring organizational resilience and compliance.
- 163-312** **Seminar in International Business and Strategy** **3 (3-0-6)**
All area of management functions related to problems encountered on Digital business, interculturalism and innovative business models; Innovation and creativity management in a dynamic international; competitive business environment; Production efficiency planning; project implementation in a global and dynamic economy; marketing in the context of different cultures and market conditions; current and prospective research trends in international business; and methodological issues in international business research.
- 163-313** **Current Issues in International Business Management** **3 (3-0-6)**
Factors that influence internationalization; entry strategies into foreign markets such as exporting, licensing, joint-ventures and tools to manage and evaluate risks; changes of international operations; tools and practices that helps to identify and interpret international business opportunities.

164-404 Project for Practicum**3 (0-6-6)***Prerequisite: 164-403 Preparation Project for Practicum*

Student project development and Perform their work related to International Business Administration. They will analyze the relevant material, the progress of the project presentation, making recommendations and drawing conclusions.

164-405 Practicum**3 (0-40-0)**

Professional experience practice in the organization or in agency or in business; Practice skills gained throughout the coursework and get experience in a career.

3. Free elective subjects**6 Credits**

Allow students to choose from courses offered in all faculties of Siam Technology College.