Master Programs QFE Alignment

Introduction

The National Qualifications Authority (NQA) has established a national framework of qualifications in order to bring coherence to the award system and relate all education and training awards to each other. The framework has a structure of ten levels with each level based on specified standards of knowledge, skills and competence. These standards define the outcomes to be achieved by learners seeking to gain awards at each level. Levels 7, 9, and 10 define the set of learning outcomes for Bachelor, Master, and Doctorate degrees respectively, which are categorised into the following three strands:

Strand	Sub-strand	Description
Knowledge (K)	Breadth	How broad is the learner's knowledge?
	Type	What characteristics and quality of knowing has the learner engaged in?
Skill (S)	Range	What is the breadth of the physical, intellectual, social and other skills acquired by the learner?
	Selectivity	How does the learner select the skills learned to address a range of problems? What is the nature of the complexity of the problems and how does the learner engage with them?
Competence	Autonomy and responsibility (AR)	How does the learner demonstrate the taking of responsibility personally and in groups? How does the learner deploy skills acquired in managing interactions with others and working on their own?
	Self-development (SD)	To what extent can the learner operate in new environments, acquire new knowledge and skills; and assimilate these to their existing body of knowledge and skills?
	Role in Context (RC)	Can the learner apply/deploy their knowledge and skills in a range of relevant contexts?

Generic Qualification Profile 9.1 (Master Degree)

Knowledge	Comprehensive, highly specialised knowledge in a discipline and/or professional practice, and at the interface between different fields, including frontier concepts and recent developments as well as advanced knowledge of applicable research principles and methods and critical awareness of knowledge issues, as the basis for original thinking encompassing appropriate processes of enquiry and current processes of knowledge production. Detailed body of knowledge of recent developments in a discipline
Skill	Advanced skills in the discipline to: • research, analyse, evaluate and/or innovate complex ideas, information, concepts and/or activities • develop new knowledge and procedures and integrate knowledge from different fields using highly developed cognitive and creative skills and intellectual independence • analyse complex issues with incomplete data and problem-solve and develop innovative solutions and proposals relevant to an academic/professional field • problem-solve in order to plan, develop and execute a major project or comparable activities (that includes a significant range of variables and complexity) with appropriately selected research methodologies producing sound conclusions, and • present, explain and/or critique highly complex matters using highly developed specialist communication and information technology skills.
Autonomy and Responsibility	Can function autonomously and/or take responsibility for: • evaluating the management of professional practices, processes or systems, or learning contexts that are highly complex, unpredictable and unfamiliar, and require new strategic approaches and/or intervention or conceptual abstract solutions • monitoring of high level governance of processes and systems, and • analysing and reflecting on socio-cultural norms and relationships and act to build and transform them.
Role in context	Can evaluate professional activities that may include a highly complex environment and take responsibility for developing measures for the strategic performance and development of professional teams and self.
Self-development	Can self-evaluate and take responsibility for: • contributing to professional knowledge and practice including unfamiliar learning contexts, or • developing and implementing further learning consistently and sensitively in accord with ethical standards.

Master of Science in Food Science

PLOS	K	S	AR	RC	SD
PLO-1: Discuss advanced concepts, theories, and emerging food science methodologies.	✓	☐	☐	☐	☐
PLO-2: Apply core knowledge of food science to identify problems and propose solutions in the field	☐	✓	✓	☐	☐
PLO-3: Design and conduct scientific research in the field of food science, and use quantitative methods to analyze results.	✓	☐	☐	✓	☐
PLO-4: Communicate scientific and technical knowledge in written and oral forms to diverse audiences.	☐	✓	☐	☐	☐
PLO-5: Demonstrate knowledge of food science contemporary issues, ethics, and professional responsibility.	☐	☐	✓	✓	✓

Master of Science in Horticulture

PLOS	K	S	AR	RC	SD
PLO-1: Discuss contemporary issues related to horticultural challenges.	☑	☐	☐	☐	☑
PLO-2: Evaluate horticultural components, processes and the role of anthropogenic factors.	☐	☑	☐	☐	☐
PLO-3: Evaluate available resources, issues and challenges related to horticultural in UAE.	☐	☑	☐	☐	☐
PLO-4: Design and conduct scientific horticulture research, and use quantitative methods to analyze results.	☐	☐	☑	☐	☐
PLO-5: Demonstrate the ability to apply knowledge and skills to resolve problems, creatively and independently.	☑	☐	☐	☐	☑
PLO-6: Evaluate issues of ethical behavior in science, critically and reflectively.	☐	☐	☑	☐	☑
PLO-7: Demonstrate strong written and oral presentation skills.	☐	☐	☐	☑	☐

Master of Professional Accounting

PLOS	K	S	AR	RC	SD
PLO-1: Demonstrate a highly developed professional oral presentation of information, criticizing substantively complex matters in accounting accompanied by appropriate technology.	☐	☑	☐	☐	☐
PLO-2: Demonstrate abilities to communicate effectively in writing, using information technology to the production of highly developed professional written materials on substantively complex matters in accounting.	☐	☑	☐	☐	☐
PLO-3: Apply advanced technologies and techniques (qualitative/quantitative) to the collection and analysis of financial and non-financial information and deriving appropriate decisions in various accounting fields.	☐	☑	☐	☐	☐
PLO-4: Critically interpret information, through accurate identification of accounting complex problems, and suggestion of accounting-based innovative solutions.	☐	☑	☐	☐	☐
PLO-5: Demonstrate autonomy, responsibility, and creativity in planning and executing major projects in their work.	☐	☐	☑	☐	☐
PLO-6: Demonstrate ability to work in teams, showing leadership and direction, appropriate to complex accounting environment settings.	☐	☐	☐	☑	☐
PLO-7: Apply professional standards and codes of conduct at national and international levels.	☐	☐	☑	☐	☑
PLO-8: Relate complex ethical issues consistently, reflecting social responsibility, and leading to informed, fair and valid accounting-related decisions.	☐	☐	☑	☐	☑
PLO-9: Demonstrate a comprehensive advanced knowledge of key concepts across the breadth of accounting topics.	☑	☐	☐	☐	☐
PLO-10: Assess contemporary issues in accounting through synthesizing knowledge from accounting and cognate fields when appropriate.	☑	☐	☐	☑	☑

Master of Business Administration

PLOS	K	S	AR	RC	SD
PLO-1: Critically evaluate business situations and challenges in global and local contexts based on in-depth interdisciplinary knowledge and the relevant business management analysis tools.	☐	☐	☐	☐	☐
PLO-2: Develop innovative tactical and strategic solutions and their implementation plans aimed at solving specific business problems and adding value to organizations.	☐	☐	☐	☐	☐
PLO-3: Make informed business decisions relying on developed quantitative and qualitative research skills and relevant ICT tools and methods.	☐	☐	☐	☐	☐
PLO-4: Display leadership behaviour and initiatives when working in teams or individually to enhance the quality of outcomes and to communicate them creatively.	☐	☐	☐	☐	☐
PLO-5: Integrate issues on sustainable development, ethics, and culture when solving complex business problems and proposing business alternatives.	☐	☐	☐	☐	☐

Master in Business Analytics

PLOS	K	S	AR	RC	SD
PLO-1: Appraise various information technologies, as well as analytical models and methods, through advanced and specialized knowledge, for transforming data into information, knowledge, and subsequently digital assets.	☑	☐	☐	☐	☐
PLO-2: Select descriptive, diagnostic, predictive, and prescriptive analytical models, methods, and tools, based on problem context, business objectives, and data sources.	☑	☑	☐	☐	☐
PLO-3: Apply analytical methods, including statistics, data analytics, and optimization, for advanced analysis of data-driven problems in business and industry.	☑	☑	☐	☐	☐
PLO-4: Develop innovative research-driven solutions for discovering actionable insights, driving sustainable decisions, and developing novel business models.	☐	☑	☐	☐	☐
PLO-5: Communicate effectively to specialized and non-specialized audiences, verbally, visually, and in writing, the results and interpretation of data-centric analyses of business and industry problems.	☐	☑	☐	☐	☐
PLO-6: Execute business analytics activities and projects with autonomy, entrepreneurship, and leadership.	☐	☑	☑	☑	☑
PLO-7: Conduct business analytics activities and projects as an effective and collaborative team member.	☐	☑	☑	☑	☐
PLO-8: Implement the principles of privacy, ethics and governance in business analytics, while reflecting on socio-cultural norms.	☐	☐	☑	☐	☑

Master of Education

PLOS	K	S	AR	RC	SD
PLO-1: Apply knowledge of child development and learning principles to provide children with healthy, respectful, and challenging learning environments.	☑	☐	☐	☐	☐
PLO-2: Build respectful partnerships with children's families and their communities and communicate with them effectively, both orally and in writing.	☐	☐	☑	☐	☐
PLO-3: Apply effective assessment strategies and tools in partnership with families and other professionals.	☐	☑	☐	☐	☐
PLO-4: Use a wide array of developmentally appropriate approaches and instructional strategies in partnership with families.	☐	☐	☑	☐	☐
PLO-5: Integrate multiple areas of knowledge in planning, implementing and evaluating developmentally appropriate and inclusive early childhood curriculum.	☐	☑	☐	☐	☐
PLO-6: Make decisions and take actions based on professional and ethical standards and develop reasoned and creative solutions.	☐	☐	☑	☐	☑
PLO-7: Develop the knowledge, skills and professional dispositions and maintain responsibility for self-development and life-long learning to promote the development and learning of young children.	☐	☐	☐	☑	☐
PLO-8: Apply a student-centered learning approach, by developing the student as a communicator, a thinker and a problem solver.	☐	☑	☐	☐	☐
PLO-9: Develop research skills necessary for integrating knowledge and concepts through effectively using information derived from a variety of sources.	☑	☐	☐	☐	☐

Master of Arts in Arabic Language and Literature

PLOS	K	S	AR	RC	SD
PLO-1: Analyze the literary texts in light of ancient and modern criticism theories.	☐	☑	☐	☐	☐
PLO-2: Explain the structural elements in the linguistic and literary lesson and the stages of their development.	☑	☐	☐	☐	☐
PLO-3: Address the questions of the linguistic phenomenon at its various levels, based on the student's readings and research.	☑	☐	☑	☐	☐
PLO-4: Evaluate published critique and rhetoric according to their knowledge of Arabic literature and its theoretical and practical connections with other kinds of literature.	☑	☐	☑	☐	☑
PLO-5: Conduct research according to academic writing and its scholarly standards.	☐	☐	☐	☑	☑

Master of Science in Remote Sensing and Geographic Information Systems

PLOS	K	S	AR	RC	SD
PLO-1: Discuss the theoretical principles of remote sensing and GIS and their role in modeling and solving environmental, urban and social issues.	☑	☐	☐	☑	☐
PLO-2: Recognize advanced analysis and interpretation skills needed in remote sensing and GIS.	☐	☑	☐	☐	☐
PLO-3: Apply practical remote sensing and GIS procedures for assessing and solving environmental, urban, geologic and societal problems.	☑	☑	☐	☑	☐
PLO-4: Communicate remote sensing and GIS related ideas and results both orally and in writing.	☐	☑	☑	☐	☑
PLO-5: Develop remote sensing and GIS project management, team work and leadership skills.	☐	☑	☑	☑	☑
PLO-6: Produce scientific research related to the applications of remote sensing and GIS.	☐	☑	☑	☑	☑

Master of Governance and Public Policy

PLOS	K	S	AR	RC	SD
PLO-1: Comprehend selected theories and methods in public governance, policy analysis, market-government relations, macro and micro economics, public budgeting, leadership, and research in the analysis and formulation of public policy.	☑	☑	☑	☐	☐
PLO-2: Conduct governance and public policy research using appropriate research methods, ethics procedures, and statistical analysis	☑	☑	☑	☑	☑
PLO-3: Apply qualitative and quantitative skills in the formulation of public policy independently and in teams.	☑	☑	☑	☑	☑
PLO-4: Use different tools and techniques in policy analysis, stakeholder management, successful policy implementation, effective program evaluation, and financial management	☑	☑	☑	☑	☑
PLO-5: Communicate descriptive and analytical knowledge effectively in written and oral format to various audiences.	☑	☑	☑	☑	☑
PLO-6: Demonstrate preparedness for continued reflective practice and lifelong learning in public policy and governance.	☑	☑	☑	☑	☑

Master of Arts in English

PLOS	K	S	AR	RC	SD
PLO-1: Assess advanced discipline-specific terminology in speech and writing	☑	☐	☐	☐	☑
PLO-2: Critique a wide variety of literary texts from different periods and cultures	☑	☑	☑	☐	☑
PLO-3: Explain advanced research methodologies	☑	☑	☐	☑	☑
PLO-4: Appraise key critical approaches within literary criticism	☑	☑	☑	☐	☑
PLO-5: Create literary print or digital texts	☑	☑	☐	☑	☑
PLO-6: Prepare discipline-specific teaching methodologies	☑	☑	☑	☐	☑

Master of Arts in Communocation

PLOS	K	S	AR	RC	SD
PLO-1: Apply theories and concepts of communication as they relate to the discipline's practices and discourses within national, regional, and international contexts.	☐	☑	☐	☐	☑
PLO-2: Demonstrate strategic level analysis and critical thinking when evaluating communication programs of an organization.	☑	☐	☑	☐	☐
PLO-3: Design knowledge driven strategic communication plans using appropriate hardware and software technologies.	☐	☐	☑	☐	☑
PLO-4: Conduct a sound academic research based on a socially relevant topic; and using appropriate research tools and methodologies.	☑	☐	☑	☑	☑

Master of Social Work

PLOS	K	S	AR	RC	SD
PLO-1: Use communication/facilitation skills ethically in building empowering relationships with the diverse populations in the UAE, the Arab Gulf and internationally.	☑	☑	☑	☑	☑
PLO-2: Employ skills for influencing policy formulation and change in communities that advance social and economic justice.	☑	☑	☑	☑	☑
PLO-3: Apply knowledge and leadership skills in managing projects, and working with community groups and/or organizations to address populations at risk and engage in community resource development	☑	☑	☑	☑	☑
PLO-4: Demonstrate skills in quantitative/qualitative research design, data analysis, program evaluation, practice evaluation, community needs assessments, and knowledge dissemination.	☑	☑	☑	☑	☑
PLO-5: Apply the knowledge, values, ethical principles, and skills of a generalist social work perspective to practice with diverse social systems in the UAE, the Arab Gulf and internationally.	☑	☑	☑	☑	☑
PLO-6: Analyze social policies at a local, regional, national, and international level.	☑	☑	☑	☑	☑
PLO-7: Evaluate existing research studies and one?s own practice interventions.	☑	☑	☑	☑	☑
PLO-8: Function within the structure of organizations and service delivery systems and seek necessary organizational change.	☑	☑	☑	☑	☑

Master of Science in Internet of Things

PLOS	K	S	AR	RC	SD
PLO-1: Discuss the evolution of the IoT paradigm, the different application areas, inter-disciplinary and emerging developments in this field.	☑	☐	☐	☐	☐
PLO-2: Evaluate the technologies associated with the IoT to reflect on, justify and recommend decisions.	☐	☑	☐	☐	☐
PLO-3: Design an IoT solution for a single or a system of devices to solve problems to meet a set of requirements.	☐	☑	☑	☐	☐
PLO-4: Develop project or research work that contributes to the IoT discipline taking into account relevant considerations such as ethics, economics, society, environment and sustainability.	☐	☐	☑	☑	☑
PLO-5: Demonstrate advanced oral and written communication skills individually and collectively.	☐	☐	☐	☑	☑

Master of Science in Software Engineering

PLOS	K	S	AR	RC	SD
PLO-1: Apply software engineering knowledge to build robust, reliable, and maintainable software.	☑	☑	☐	☐	☐
PLO-2: Design complex systems based on efficiency, cost and data availability.	☑	☑	☐	☑	☐
PLO-3: Evaluate in depth the relative merits of software systems and artifacts at different levels of system architecture.	☐	☐	☑	☑	☐
PLO-4: Analyze Critically emerging software models, techniques, and technologies.	☑	☐	☐	☐	☑
PLO-5: Execute ethically project work or research that contribute significantly to Software Engineering discipline.	☑	☑	☑	☑	☑
PLO-6: Demonstrate advanced oral and writing communication skills individually and collectively	☐	☐	☑	☑	☐

Master of Science in Information Security

PLOS	K	S	AR	RC	SD
PLO-1: Apply information security knowledge and effective security strategies and standards.	☑	☐	☐	☐	☑
PLO-2: Design effective security solutions based on given requirements.	☐	☑	☐	☑	☐
PLO-3: Evaluate in depth enterprise security systems.	☐	☐	☑	☐	☐
PLO-4: Execute ethically project work or research that contributes significantly to the information security discipline.	☐	☑	☑	☐	☑
PLO-5: Demonstrate advanced oral and written communication skills individually and collectively.	☐	☑	☑	☐	☑
PLO-6: Analyze critically emerging information security concepts, models, techniques, and solutions.	☑	☑	☐	☐	☐

Master of Science in Information Technology Management

PLOS	K	S	AR	RC	SD
PLO-1: Demonstrate advanced understandings of the complex body of knowledge that involve the different IT management approaches.	☑	☐	☐	☐	☑
PLO-2: Evaluate in depth enterprise architectures for developing and delivering products and services to the marketplace.	☐	☑	☑	☐	☐
PLO-3: Develop ethically project work or research that contributes significantly to the current business needs and compliant with cutting-edge technology.	☐	☐	☑	☑	☑
PLO-4: Develop enterprise-wide IT management skills and expand the knowledge for lifelong learning and professional development.	☑	☑	☐	☐	☑
PLO-5: Critically analyze, synthesize, and make use of management information to solve complex IT management problems	☐	☑	☑	☐	☐
PLO-6: Demonstrate advanced oral and written communication skills in a teamwork environment.	☐	☑	☐	☑	☐

Master of Science in Clinical Psychology

PLOS	K	S	AR	RC	SD
PLO-1: Demonstrate clinical knowledge that is culturally sound and relevant to professional and ethical practices in the field of mental health.	☑	☑	☑	☑	☑
PLO-2: Conduct proper psychological assessment.	☑	☑	☑	☑	☑
PLO-3: Diagnose successfully clients? clinical problems using DSM/ ICD.	☑	☑	☑	☑	☑
PLO-4: Create suitable treatment plans for diverse psychological disorders.	☑	☑	☑	☑	☑
PLO-5: Apply therapeutic skills to help clients (individuals and groups) overcome their psychological disorders.	☑	☑	☑	☑	☑
PLO-6: Communicate comprehensive and understandable psychological reports to all parties involved.	☑	☑	☑	☑	☑
PLO-7: Apply appropriate methodology to conduct research in clinical psychology.	☑	☑	☑	☑	☑

Master of Science in Human Nutrition

PLOS	K	S	AR	RC	SD
PLO-1: Evaluate the impact of nutrition on health status of individuals and communities.	☑	☑	☐	☐	☐
PLO-2: Design nutrition interventions using scientific evidence in improving health and well-being of individuals and communities.	☐	☑	☑	☑	☐
PLO-3: Conduct outcome-based research by using ethical guidelines and appropriate research methods of assessments and analysis.	☐	☑	☑	☑	☑
PLO-4: Demonstrate advanced writing and oral communication skills using the scientific literature.	☐	☑	☑	☐	☑

Master of Science in Genomic Medicine

PLOS	K	S	AR	RC	SD
PLO-1: Explain genetics concepts and the genetic basis of disease.	☑	☐	☐	☐	☐
PLO-2: Critically discuss genome technologies and their actual and potential impact in clinical practice.	☐	☑	☑	☐	☑
PLO-3: Interpret genomic information as part of a diagnostic service or treatment protocol.	☐	☑	☑	☑	☑
PLO-4: Identify the latest developments in research methodologies and clinical application.	☑	☐	☐	☐	☐
PLO-5: Formulate a research hypothesis, collect and analyse scientific data, and undertake professionally relevant research.	☐	☐	☑	☑	☑

Master of Genetic Counceling

		K	S	AR	RC	SD
PLO 1	Apply genomic principles in a clinical setting to provide accurate risk information to individuals and families impacted by a genomics.	√	√	√	√	
PLO 2	Convey clearly and efficiently the genomic health information to a variety of audiences including patients, peers, and non-genetic health professionals.	√	√	√	√	
PLO 3	Provide psychosocial support to individuals and families while advocating for and promoting informed decision making.		√	√	√	
PLO 4	Apply ethical and privacy principles in all interactions, especially in clinical and research settings.	√	√	√	√	
PLO 5	Conduct collaborative research to improve knowledge, practice and understanding of genetic counseling.	√				

Master of Medical Sciences

PLOS	K	S	AR	RC	SD
PLO-1: Apply the knowledge of biomedical sciences in their scholarly activities.	☑	☐	☐	☐	☐
PLO-2: Demonstrate communication skills (with peers and colleagues) that are effective in the exchange and translation of knowledge and information.	☐	☑	☐	☑	☐
PLO-3: Apply professional ethics and commitment to their scholarly activities.	☐	☐	☑	☐	☐
PLO-4: Engage in collaborative health science research.	☐	☑	☑	☑	☑
PLO-5: Use quantitative and qualitative methods present and defend their scientific research findings.	☑	☑	☐	☐	☐

Master of Public Health

PLOS	K	S	AR	RC	SD
PLO-1: Use advanced concepts, methods, and tools of public health data collection, analysis and interpretation.	☑	☑	☐	☐	☐
PLO-2: Identify and address the major health-related needs and concerns of populations using population health concepts and methods	☑	☑	☐	☐	☐
PLO-3: Analyze the biological, environmental, socio-economic, behavioral, cultural, and other factors that impact human health.	☑	☑	☐	☐	☐
PLO-4: Use effective communication and strategies for promoting health and preventing disease across the lifespan.	☑	☑	☑	☑	☑
PLO-5: Compare the characteristics and organizational structures of health care systems in selected countries.	☑	☑	☐	☐	☐
PLO-6: Explain the legal, ethical, economic, and regulatory dimensions of health care and public health policy.	☑	☑	☑	☑	☑

Master of Science in Architiculral Engineering

PLOS	K	S	AR	RC	SD
PLO-1: Apply advanced research techniques and methods to the analysis and solution of engineering problems.?	☐	☑	☑	☐	☐
PLO-2: Demonstrate advanced knowledge sufficient to analyze complex environmental issues related to?building and urban systems.?	☑	☐	☑	☑	☑
PLO-3: Develop comprehensive engineering systems, highly specialized components, or appropriate processes for built environment.	☑	☑	☐	☑	☐
PLO-4: Apply advanced knowledge in a specialized and emerging area in high performance built environment.?	☑	☑	☐	☐	☐
PLO-5: Develop communication skills to present, explain and criticize highly complex issues.?	☐	☑	☑	☑	☑
PLO-6: Evaluate engineering systems in high performance built environment according to relevant regulations and codes.?	☐	☑	☐	☑	☐
PLO-7: Evaluate knowledge of contemporary professional practice in high performance built environment.?	☑	☑	☐	☑	☐

Master of Science in Chemical Engineering

PLOS	K	S	AR	RC	SD
PLO-1: Apply advanced concepts of fundamental sciences and engineering to solve complex Chemical Engineering problems.	☑	☑	☐	☐	☐
PLO-2: Demonstrate the ability to work effectively both independently and in teams of various backgrounds.	☐	☑	☑	☑	☐
PLO-3: Apply innovative and practical solutions to existing or novel processes in research.	☑	☑	☐	☐	☐
PLO-4: Search, evaluate and acquire information from relevant chemical engineering literature.	☑	☑	☑	☐	☑
PLO-5: Design advanced approaches to conduct chemical engineering experiments.	☑	☑	☐	☐	☐
PLO-6: Use advanced quantitative and qualitative methods to interpret research experimental results.	☑	☑	☑	☑	☐
PLO-7: Disseminate and discuss their professional and scientific work to the general public, as well as to experts in both writing and oral formats.	☐	☑	☑	☑	☑
PLO-8: Observe and apply ethical and professional codes and responsibilities.	☐	☐	☑	☑	☐

Master of Science in Petroleum Engineering

PLOS	K	S	AR	RC	SD
PLO-1: Apply advanced concepts of fundamental sciences and engineering to solve complex Petroleum Engineering problems.	☑	☑	☐	☐	☐
PLO-2: Demonstrate the ability to work effectively both independently and in teams of various backgrounds.	☐	☑	☑	☑	☐
PLO-3: Apply innovative and practical solutions to existing or novel processes in research.	☑	☑	☐	☐	☐
PLO-4: Search, evaluate and acquire information from relevant petroleum engineering literature.	☑	☑	☑	☐	☑
PLO-5: Design advanced approaches to conduct petroleum engineering experiments.	☑	☑	☐	☐	☐
PLO-6: Use advanced quantitative and qualitative methods to interpret research experimental results.	☑	☑	☑	☑	☐
PLO-7: Disseminate and discuss their professional and scientific work to the general public, as well as to experts in both writing and oral formats.	☐	☑	☑	☑	☑
PLO-8: Observe and apply ethical and professional codes and responsibilities.	☐	☑	☑	☐	☑

Master of Science in Civil Engineering

PLOS	K	S	AR	RC	SD
PLO-1: Describe highly specialized civil engineering principles, concepts, and methodologies.	☑	☐	☐	☐	☐
PLO-2: Evaluate the performance of advanced civil engineering systems and components through the use of applicable research principles, analytical methods and modelling techniques.	☑	☑	☑	☐	☐
PLO-3: Conduct advanced applied research to develop innovative solutions for highly complex civil engineering problems through the use of appropriately selected research methodologies and modern engineering tools.	☑	☑	☑	☐	☑
PLO-4: Apply advanced multidisciplinary problem-solving approaches to critically analyze contemporary, sophisticated, and highly complex civil engineering problems.	☑	☑	☑	☐	☑
PLO-5: Present and critique highly complex civil engineering issues and communicate effectively at a high level of proficiency.	☐	☑	☐	☐	☐
PLO-6: Lead professional activities and manage ethical issues in highly complex civil engineering projects.	☐	☐	☑	☑	☑
PLO-7: Implement the social, environmental, ethical, economic and commercial aspects to develop valid decisions affecting highly complex civil engineering projects.	☐	☐	☑	☐	☑

Master of Science in Water Resources

PLOS	K	S	AR	RC	SD
PLO-1: Gain comprehensive knowledge on Water Resources Assessment, Development and Management with specific reference to arid regions conditions	☑	☐	☐	☐	☐
PLO-2: Acquire skills to address contemporary issues related to Water Resources and understand their social and economic impacts.	☑	☑	☑	☐	☑
PLO-3: Develop skills of utilizing modern assessment and prediction tools related to water resources including field tests and computer software.	☐	☑	☐	☐	☑
PLO-4: Communicate effectively and produce professional reports related to various disciplines of Water Resources.	☐	☑	☑	☑	☐
PLO-5: Apply basic concepts in management, public policy and leadership in various areas of water resources.	☐	☐	☑	☑	☑

Master of Science in Electrical Engineering

PLOS	K	S	AR	RC	SD
PLO-1: Demonstrate understanding of highly specialized electrical engineering principles, concepts, and methodologies .	☑	☑	☐	☐	☐
PLO-2: Evaluate the performance of advanced electrical engineering systems and components through the use of applicable research principles, analytical methods and modelling techniques.	☑	☑	☑	☐	☐
PLO-3: Conduct advanced applied research to develop innovative solutions for highly complex electrical engineering problems through the use of appropriately selected research methodologies and modern engineering tools.	☑	☑	☑	☑	☑
PLO-4: Apply advanced multidisciplinary problem-solving approaches to critically analyze contemporary, sophisticated, and highly complex electrical engineering problems.	☑	☑	☑	☑	☐
PLO-5: Present and critique highly complex industrial electrical engineering issues and communicate effectively at a high level of proficiency.	☑	☑	☐	☑	☐
PLO-6: Demonstrate leadership and management of professional activities and ethical issues in highly complex electrical engineering projects.	☐	☑	☑	☑	☑
PLO-7: Recognize the social, environmental, ethical, economic and commercial considerations and professional responsibilities affecting highly complex industrial electrical engineering projects.	☐	☐	☑	☐	☑

Master of Science in Mechanical Engineering

PLOS	K	S	AR	RC	SD
PLO-1: Apply knowledge and skills ethically for solving mechanical engineering problems and drawing conclusions.	☑	☑	☐	☑	☑
PLO-2: Conduct mechanical engineering studies utilizing experimental, computer software and other modern tools.	☑	☑	☑	☑	☑
PLO-3: Communicate effectively, both orally and in writing to present technical and research work.	☐	☑	☑	☑	☐
PLO-4: Conduct independently and with a team quality scientific and applied research.	☑	☑	☑	☑	☑

Master of Engineering Management

PLOS	K	S	AR	RC	SD
PLO-1: Understand the designing process and synthesize strategies to manage designing an overall engineering system or product that meets desired needs.	☑	☑	☑	☑	☑
PLO-2: Apply knowledge of mathematics, engineering and technology in managing engineering processes.	☑	☑	☑	☑	☑
PLO-3: Analyze engineering problems relating to Quality and manufacturing operations and Synthesize Solutions.	☑	☑	☑	☑	☑
PLO-4: Understand supply chain concepts and apply them to improve the business? overall and supply chain performance	☑	☑	☑	☑	☑
PLO-5: Apply concepts to manage technological innovations and synthesize relevant business strategy.	☑	☑	☑	☑	☑
PLO-6: Apply the accounting information for decision-making	☑	☑	☑	☑	☑
PLO-7: Apply knowledge of applied statistics and decision techniques in managing engineering processes.	☑	☑	☑	☑	☑
PLO-8: Analyze subjects with technical and business content and synthesize effective written reports and oral presentations	☑	☑	☑	☑	☑
PLO-9: Apply theories of human behavior to analyze and evaluate the role of managers and leaders in driving effective employee behaviors in industrial organizational contexts.	☑	☑	☐	☑	☑

Master of Science in Mechanical Engineering

PLOS	K	S	AR	RC	SD
PLO-1: Identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.	☑	☑	☐	☐	☐
PLO-2: Apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.	☑	☑	☑	☐	☐
PLO-3: Communicate effectively with a range of audiences.	☐	☑	☑	☑	☐
PLO-4: Recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.	☑	☑	☑	☐	☑
PLO-5: Function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.	☐	☑	☑	☑	☑
PLO-6: Develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.	☑	☑	☑	☐	☐
PLO-7: Acquire and apply new knowledge as needed, using appropriate learning strategies.	☑	☐	☐	☐	☑

Master of Private Law

PLOS	K	S	AR	RC	SD
PLO-1: يحلل القضايا والنصوص القانونية تحليلاً علمياً سليماً	☑	☑	☑	☑	☑
PLO-2: يقارن الآراء الفقهية والاتجاهات التشريعية والقضائية المختلفة وبخاصة في النظام القانوني الإماراتي	☑	☑	☑	☑	☑
PLO-3: ينجز بحثاً علمياً معمقاً في فرع من فروع القانون الخاص باستخدام مناهج البحث القانوني المعتمدة، وتحليل البيانات وباستخدام المصادر العلمية	☑	☑	☑	☑	☑
PLO-4: يعرض حججه القانونية بثقة ومنهجية سليمة	☑	☑	☑	☑	☑
PLO-5: يتقيد بالقواعد الأخلاقية والمهنية في إنجاز الأعمال الموكولة إليه	☑	☑	☑	☑	☑
PLO-6: يقود فريق عمل لحل المسائل القانونية ذات الصلة	☑	☑	☑	☑	☑

Master of Public Law

PLOS	K	S	AR	RC	SD
PLO-1: يحلل القضايا والنصوص القانونية تحليلاً علمياً سليما	☑	☐	☐	☐	☐
PLO-2: ينقد الآراء الفقهية والاتجاهات التشريعية والقضائية المختلفة مدعماً ذلك بالحجج والبراهين المناسبة	☑	☐	☐	☐	☐
PLO-3: ينجز بحثاً علمياً معمقاً في فرع من فروع القانون العام باستخدام مناهج البحث القانوني المعتمدة، وتحليل البيانات	☐	☑	☐	☐	☑
PLO-4: يقود بفاعلية فريق عمل	☐	☐	☑	☐	☐
PLO-5: يعرض نشاطه البحثي شفهيا بطريقة علمية صحيحة	☐	☑	☐	☐	☐
PLO-6: يتعلم ذاتياً من خلال المستجدات الواقعية والعلمية	☑	☐	☐	☐	☑
PLO-7: ينجز الأعمال الموكولة إليه بطريقة مهنية متقيدا بالقواعد الأخلاقية	☐	☐	☑	☑	☐

Master of Science in Environmental Sciences and Sustainability

PLOS	K	S	AR	RC	SD
PLO-1: Discuss contemporary issues relating to environmental challenges, ethics, and professional responsibilities.	☑	☐	☐	☐	☐
PLO-2: Describe relationships between environmental components and processes and the role of anthropogenic factors.	☑	☐	☑	☐	☐
PLO-3: Evaluate material from available resources on issues and challenges relating to environmental problems facing the UAE.	☑	☑	☑	☑	☑
PLO-4: Evaluate the means by which human society can conserve and restore the environment using approaches drawn from various sciences and fields of study.	☑	☐	☑	☑	☑
PLO-5: Demonstrate strong written and oral presentation skills.	☐	☑	☐	☐	☐
PLO-6: Conduct scientific environmental research, and use quantitative methods to analyze results.	☐	☑	☐	☑	☐

Master of Science in Molecular Biology and Biotechnology

PLOS	K	S	AR	RC	SD
PLO-1: Demonstrate leading edge knowledge in a chosen specialized area of molecular biology and/or biotechnology	☑	☐	☐	☐	☐
PLO-2: Gain insight into the most significant and recent biotechnology and molecular-based methods used to expand the understanding of biology.	☑	☑	☐	☐	☐
PLO-3: Manage and analyze data stored in databases, familiarize with various bioinformatics analysis tools available to analyze biological data.	☐	☐	☐	☐	☑
PLO-4: Conduct scientific molecular biology and/or biotechnology research, and use quantitative methods to analyze results	☑	☑	☐	☐	☐
PLO-5: Evaluate methods and results within the field of specialization critically and ethically.	☐	☑	☐	☑	☐
PLO-6: Work independently or in a team on complex project that requires multidisciplinary collaboration	☐	☐	☑	☐	☑
PLO-7: Communicate scientific results to both experts and general audience through writing structured reports and contributions for scientific publications and posters, and by oral presentations.	☐	☑	☐	☑	☐

Master of Science in Chemistry

PLOS	K	S	AR	RC	SD
PLO-1: Solve complex problems in chemical applications.	☑	☑	☐	☐	☐
PLO-2: Use modern methods to carry out research and solve real life problems.	☑	☑	☐	☑	☑
PLO-3: Properly document and present the results of research work.	☑	☑	☐	☑	☑
PLO-4: Work effectively in teams and manage group tasks.	☑	☑	☐	☑	☑
PLO-5: Apply appropriate ethical standards to issues related to science, research, and work.	☑	☑	☐	☑	☑
PLO-6: Critically evaluate new information in the field of chemistry	☑	☑	☑	☑	☑

Master of Science in Geosciences

		K	S	AR	RC	SD
PLO 1	*Demonstrate a comprehensive knowledge and skills for geoscience problem solving.*	√				
PLO 2	*Develop competence in advanced field, laboratory, and data analysis techniques related to the research discipline.*		√			
PLO 3	*Construct competence in search and review of previous studies.*	√	√	√	√	√
PLO 4	*Build independent self-management and working in a team capacity.*	√	√	√	√	√
PLO 5	*Communicate professionally in writing and presentation of scientific results.*	√	√	√	√	√

Master of Science in Mathematics

PLOS	K	S	AR	RC	SD
PLO-1: Discuss in depth concepts, techniques, and results related to active research in Mathematics.	☑	☐	☐	☐	☐
PLO-2: Solve mathematical problems using theoretical tools and/or modeling.	☐	☑	☐	☐	☐
PLO-3: Develop concise mathematical proofs.	☐	☑	☐	☐	☐
PLO-4: Produce a comprehensive independent work, including a literature review.	☐	☐	☑	☐	☑
PLO-5: Contribute actively to research projects in mathematics, using an adequate methodology.	☐	☐	☑	☐	☐
PLO-6: Communicate effectively mathematical results to a specialized audience.	☐	☐	☐	☑	☐
PLO-7: Demonstrate awareness of ethical issues related to science, research, and work.	☐	☐	☑	☐	☐

Master of Science in Physics

PLOS	K	S	AR	RC	SD
PLO-1: Demonstrate mastery of advanced topics in Physics and related disciplinary skills.	☑	☑	☐	☐	☐
PLO-2: Evaluate and solve complex real-world scientific problems both systematically and creatively	☑	☑	☑	☐	☐
PLO-3: Demonstrate advanced oral and written communication skills individually and collectively.	☐	☑	☑	☐	☐
PLO-4: Execute ethically project work or research that contributes significantly to the physics discipline.	☐	☐	☐	☑	☑

Master of Science in Space Science

PLOS	K	S	AR	RC	SD
PLO-1: Develop thorough understanding and professional skills by making use of appropriate literature and research resources.	☑	☐	☐	☐	☐
PLO-2: Evaluate complex inter-disciplinary challenges to be resolved through space science and technology.	☐	☑	☑	☐	☑
PLO-3: Formulate and carry forward space science research and development by applying scientific principles in Space Sciences.	☐	☑	☐	☑	☐
PLO-4: Create innovative Space Systems solution through mission-specific projects.	☑	☑	☐	☑	☐
PLO-6: Design solutions to multi-faceted space science problems both systematically and analytically as part of a diverse team.	☐	☑	☑	☐	☐
PLO-5: Compose scientific results in the form of publications, presentations, thesis and reports.	☑	☑	☑	☑	☑