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1 Introduction to QMES

1.1 Message From the Deans

Dear Students,

Welcome to Queen Mary University of London Engineering School, Northwestern Polytechnical University (QMES)!

As the first Joint Educational Institution (JEI) established in Northwest China, QMES was founded on the basis of the acknowledged expertise and experience of Queen Mary University of London (QMUL) and Northwestern Polytechnical University (NPU). QMES takes full advantage of the two universities' complementary research strengths in Materials Science and Engineering and Polymer Materials and Engineering to provide high quality transnational undergraduate degree programs.

NPU, a member of the "Excellent Union 9 (E9)", is listed as a "Double-First Class" university in China. It is the only multidisciplinary and research-oriented university in China simultaneously developing education and research programs in the fields of aeronautics, astronautics, and marine technology engineering. QMUL, established in 1887, is a member of the prestigious Russell Group amongst top UK universities. As a research-oriented university, QMUL, ranked 7th for research quality in the 2021 Research Excellence Framework (REF) in the UK, 94th in the US News World University Rankings and 110th in QS World University Rankings in 2026.

Students of QMES show great talent and potential in their course study and research innovation. QMES students have received 135 international awards, 106 national awards and 206 provincial and ministerial awards. Our student teams participated in the China College Students Innovation and Entrepreneurship Competition each year and won 12 gold prize, 5 silver prizes, 24 bronze prizes. Students have won 1 national first award and 4 bronze prizes in the "Challenge Cup" Competition. 5 students have won the MCM/ICM F prizes. Under the guidance of their supervisors, QMES undergraduate students have published 260 academic papers, and have been authorized 110 patents and utility models.

In the Graduate Class of 2025, 69 students received postgraduate recommendations, most of which were admitted to Tsinghua University, Peking University and other C9 universities in China. 41 students passed the Postgraduate Entrance Examination and were accepted by first class Chinese

universities. 73 outstanding students have been admitted to the QS Top100 universities. Among them, 7 students will further their study at Cambridge University and University of Oxford respectively. What's more, 7 students were employed by well-known enterprises. The total rate of further study exceeds 87% and the rate of further development is 93%.

Our academic staff are committed to unlocking students' creativity, equipping them with knowledge, and educating them with desired attributes necessary in a globalized world. We will seize opportunities and create new possibilities to promote high quality education and research. With rich educational resources from both NPU and QMUL, we firmly believe that our QMES students will become competent global citizens on the international stage.

We are looking forward to seeing you at NPU campus!

Dean of QMES

Fan Xiaoli 

Executive Vice Dean of QMES

Maria Romero-Gonzalez 

1.2 Joint Educational Institution Framework

The Joint Educational Institution (JEI), also known as Queen Mary University of London Engineering School, Northwestern Polytechnical University (QMES) was granted permission by the Chinese Ministry of Education on May 20th, 2016 and was officially launched on October 12th, 2016. Currently, JEI consists of 4 independent administrative organizations dealing with the importation decisions and daily affairs of QMES, and 3 specialized organizations focusing on academic research and cooperation and international development of teachers and students.

- **Joint Administrative Committee (JAC)** consists of 17 members, 9 from NPU and 8 from QMUL, in charge of making important decisions of JEI. Yang Yixin, Member of the Party Standing Committee and Vice President of NPU, is the Chair of the JAC. Wen Wang, Vice Principal of QMUL, is the Vice Chair of the JAC. On the NPU side, the current members are Yue Xiaokui, Vice President of NPU; Wang Haipeng, Director of Teaching Affairs Division of NPU; Han Suomin, Director of Financial Strategy Division of NPU; Kong Jie, Director of International Cooperation Office of NPU; Fu Qiangang, Dean of School of Materials Science and Engineering of NPU; Gu Junwei, Dean of School of Chemistry and Chemical Engineering of NPU; Fan Xiaoli, Dean of QMES, and Dai Fuping, Secretary of the Party Committee and Vice Dean of QMES. On the QMUL side, the current members are Christopher Bray, Dean for Education of Faculty of Science and Engineering; Alex Clark, Dean for Global Engagement of Faculty of Science and Engineering; Hazel Screen, Head of School of Engineering and Materials Science; James Busfield, Deputy Head of School of Engineering and Materials Science; Joanne Kirner, Operation Director of Faculty of Science and Engineering; Mike Reece, Director of JRI-AMAS; and Maria Romero-Gonzalez, Executive Vice Dean of QMES.
- **Academic Committee (AC)** consists of 12 members, 6 from the QMUL and another 6 from the NPU (a member from NPU is still to be determined), responsible for supervising academic standards, examining teaching materials, and managing relevant academic activities. Prof. Wang Yongxin is the NPU Chair of AC, Prof. Christopher Bray is the QMUL Chair of AC, and Dr. Maria Romero-Gonzalez is the Deputy QMUL Chair of AC. The AC's current members include Prof. Tian Wei, Prof. Luo Jiao, Prof. Shi Xuetao, and Prof. Gao Pengfei from the NPU

side, and Dr. Colin Crick, Dr. Faith Nightingale, and Dr. Dimitrios Papageorgiou from the QMUL side.

- **Examination Board (EB)** consists of 10 members: Dr. Li Zhe, the Chair of the EB, Prof. Wang Yongxin, the Vice Chair, Prof. Shi Xuetao and Prof. Gao Pengfei from NPU, Dr. Maria Romero-Gonzalez, Dr. Colin Crick, Dr. Andrew Spowage, Dr. Colin Crick and Dr. Andrew Bushby from QMUL, Prof. Liu Feng, Prof. Ge Wenjie, Dr.Ian Hamerton, Dr. Jonathan Leader and Prof. Sarah Green as External Examiners. The EB is mainly responsible for assessing academic performance of students, confirming and announcing examination results.
- **Student-Staff Liaison Committee (SSLC)** consists of 21 members including 8 student members from 4 cohorts. Ms. Cheng Yin, Vice Dean of QMES, is the Chair of the **SSLC**; Dr. Wang Li, Director of Student Experience is the co-chair of the **SSLC**. The **SSLC** is a communication mechanism built between teachers and students.

  The JEI has also established three agencies in the fields of scientific research, teaching development and student development.

- **NPU-QMUL Joint Research Institute on Advanced Materials and Structures (JRI-AMAS)** was established on August 27, 2017 and is composed of 6 research orientations in the field of advanced materials and structures. It aims to create favorable conditions for high-level academic research, international scientific and technological cooperation projects, and bilateral exchanges between postgraduate students.
- **International Centre for Teaching and Learning (ICTL)** was set up on June 25, 2018, to provide an international teaching research platform with global influence, exploring efficient and cutting-edge teaching methods in engineering disciplines and gradually creating a new paradigm for training international top talents in engineering disciplines.
- **Centre for Students' International Development (CSID)** was officially launched on April 27th, 2019 with the witness of Mr. Nick Low, Counselor of the British Embassy in China. It is a platform to initiate an international network to serve students' growth and help them to be the participants, contributors and beneficiaries of global governance.

1.3 Administrative Staff of JEI

QMES' current leadership consists of a Dean, a Secretary of the Party Committee, two Vice

Deans and an Executive Vice Dean. Additionally, there are one office, three centers and two departments in the JEI: School Office, Education and Teaching Center, Student Affairs Center, Students International Development Center, Department of Materials Science and Engineering and Department of Polymer Materials and Engineering. Besides, QMUL also sets two administrative offices both in Xi'an and London.

- **Current Leadership:**

  Fan Xiaoli, Dean of QMES, presides over all the administrative work and the QMES Office.

  Dai Fuping, Secretary of the Party Committee and Vice Dean of QMES, manages affairs related to the Party Committee of QMES.

  Maria Romero-Gonzalez, Executive Vice Dean of QMES, assists the Dean in teaching affairs and daily management of JEI.

  Wang Yongxin, Vice Dean of QMES, manages teaching affairs and recruitment, and is in charge of the Education and Teaching Center.

  Cheng Yin, Deputy Secretary of the Party Committee and Vice Dean of QMES, manages student affairs and assists the matters of the Party Committee of QMES, and is in charge of the Student Affairs Center.

- **QMES Office**

  Director: Yang Ye

  Sixth-administrative-level Staff: Wu Ajing

  Organizer of the Party Committee of QMES: Huang Quanzhang

  Staff: Lei Xiaoyan, Ma Huili, Zhang Han, Zhao Chunyi, Gao Bei, Zhang Lina, Wang Siyu

  Tel: 029-88431990

  Address: Room 409, East Teaching Building A, Chang'an Campus

  Office hours: 9:00-17:00, Monday-Friday

- **Education and Teaching Center**

  Director: Yang Yufei

  Staff: Ding Jing, Liu Kejia, Fan Lanyu, Zhang Jiayu, Xiong Yi

Tel: 029-88431982/029-88431985

Address: Room 409, East Teaching Building A, Chang'an Campus

Office hour: 9:00-17:00, Monday-Friday

- **Student Affairs Center**

  Staff: Yang Fenping, Wang Ruixuan, Tong Miaomiao, Ma Xiaoxuan

  Student Counselor: Liu Jia, Huang Quanzhang, Ge Qu, Wang Jinming

  Tel: 029-88431987

  Address: Room 406, East Teaching Building A, Chang'an Campus

  Office hour: 9:00-17:00, Monday-Friday

- **Students International Development Center**

  Director: Li Qi

  Staff: Bi Jialong, Song Jiayin

  Tel: 029-88431987

  Address: Room 406, East Teaching Building A, Chang'an Campus

  Office hour: 9:00-17:00, Monday-Friday

- **Departments:**

  Gao Pengfei: Director of the Department of Materials Science and Engineering

  Shi Xuetao: Director of the Department of Polymer Materials and Engineering

- **QMUL Directors**

  Colin Crick: Director of Operations, is responsible for certification evaluation, supervision of the examination committee, and academic conduct regulation.

  Faith Nightingale: Director of Education, is responsible for quality assurance supervision, course syllabus construction, and staff development.

  Li Wang: Director of student affairs, is responsible for course and student feedback, programs for winter and summer vacations, and quality supervision of the SSLC.

- **QMUL Office in Xi'an**

Education Manager: Qi Yue

Assistant Education Manager：Li Yangyang, Meng Jiarong

Tel: 029-88431984/029-88431986

Address: Room 403, East Teaching Building A, Chang'an Campus

Office hours: 9:00-17:00, Monday-Friday

- **QMUL Office in London**

  Operations Manager: Jacob Kneen

  Administrator: Chelsea Zhang-Anegbeh, Nabil Cassim

  Tel: 0044-20 7882 7321

  Address: SEMS School office, School of Engineering and Materials Science, Queen Mary University of London, London, E1 4NS

1.4 Facilities for Students

Apart from NPU's public educational platform, the JEI also provides students with 164 large and medium-sized equipment, scientific research, and talent training platform at national and provincial levels.

Located in East Building B, Chang'an Campus of NPU, JEI offers standardized classrooms with Smart Board, projector, TV screen, microphone, and camera. Classrooms of different sizes are provided to fulfill different requirements of teaching activities.

JEI students can log in to not only NPU Library Management System, but also online learning system QMplus, online video conference system, and online library system of QMUL to borrow books, study online and review key points in various lessons.

After admission, JEI students stay at the Chang'an campus of NPU, 4 students in one room with heating system, air-conditioner and elevator provided.

2 Education Programs for Undergraduates

2.1 Materials Science and Engineering Education Plan for 2025 Undergraduates （QMUL Engineering School）

2.1.1 Programme Outline

Materials are the physical foundation upon which human survival depends, and materials science and engineering form the basis of all industries. It builds the development foundation of many scientific research and industries, such as new energy, sustainable development, bio-science, health and medicine, information technology, and intelligent manufacturing. As a popular programme for undergraduates,Materials Science and Engineering in Queen Mary University of London (hereinafter as QMUL) covers metals, ceramics, polymers, and composite with the involvement of chemistry, materials and engineering. It is one of the most influential and distinct programmes in QMUL. We provide elite education and professional training for students with a thorough grounding in the structure of materials, the properties of materials, the performance of materials, the manufacturing processes and design, shaping and applications. It has been rated as 5-star programme by the British government for many times. A survey conducted by the National Union of Students in 2011 showed that it ranked top 1 in the UK. In the first three rounds of discipline evaluation conducted by the Ministry of Education of China, the Materials discipline at Northwestern Polytechnical University (NPU) was ranked 9th, 6th, and 3rd respectively. In the fourth round, it received an 'A' rating, and in the fifth round, it achieved a significant breakthrough, positioning itself at the forefront of the top tier. It was selected twice, in 2017 and 2022, for inclusion in the national "Double First Class" initiative for discipline development, with its ESI discipline ranking entering the top 0.28%. NPU has 6 national-level platforms for scientific research and talent training.

QMES international faculty team comprises 102 teachers in total, with the 18 teachers from QMUL and 84 from NPU. Among the 18 teachers from QMUL, there is 1 professor, 3 associate professors, 6 senior lecturers, and 8 lecturers. Within the 84 teachers from NPU, there are 37 professors, 2 senior engineer, 44 associate professors/associate researchers, and 1 lecturers. Among them, there are 9 national-level talents and 6 provincial/ministerial-level talents. Out of all teachers,

79 have experience of studying or working abroad. The teaching staff are involved in 35 various educational reform projects, with 5 receiving the Baosteel Outstanding Teacher Award and 7 others receiving awards for educational excellence from Queen Mary University of London, including special awards from the principal. There are 4 national-level leading talents, 5 national-level young talents, 3 elected as fellows of the UK Institute of Materials, Minerals and Mining, and 1 elected as a fellow of the Higher Education Academy in the UK.

In order to learn from the advanced concept and model of training innovative undergraduate talents in British higher education and provide Chinese students with an authentic British-style higher education in their homeland, NPU and QMUL have launched a joint educational institution named Queen Mary University of London Engineering School, Northwestern Polytechnical University (hereinafter referred to as QMES), which was approved by the Ministry of Education of China. QMES, builds on the acknowledged expertise and experience of the two universities and their complementary research strengths in materials science, engineering, chemical and fully uses educational resource advantages and high-level international cooperation platforms of both universities to provide a high quality degree level education in the programme of Materials Science and Engineering (080401H). We draw on the academic expertise of both institutions and adopt an international teaching mode with curriculum system, teaching materials, and assessment methods from the UK. We aim to cultivate interdisciplinary leading talents who possess an international perspective and recognition of international rules in the field of engineering. With advanced materials and their preparation technology as the core, our programme integrates with the international frontiers of materials science and chemical engineering disciplines. We aim to nurture individuals with patriotism and social responsibility, as well as solid foundations in natural sciences, materials science and engineering, and humanities. Our graduates have strong professional competitiveness, high comprehensive competence, innovative consciousness and capabilities, and lifelong learning abilities.

2.1.2 Aims of the Programme

Focused on the international academic forefront of materials science, committed to the progress of human civilization and the development of the materials science discipline, this programme aims to cultivate interdisciplinary leading talents with a strong sense of national pride and social responsibility, possessing a solid foundation in natural science, materials scienceand

engineering, and humanities, and possessing the abilities of innovation and lifelong learning. We aim to develop interdisciplinary leading talents who can engage in design and development, manufacturing, engineering management, and scientific research in fields such as mechanical manufacturing, electronic information, telecommunications, computing, and biopharmaceuticals related to materials and chemical engineering. Students who have completed their studies will be able to pursue higher degrees and research within universities in China and internationally or careers in world famous enterprises and international organization.

(1) Humanistic Literacy

Graduates can accurately understand China's characteristics and compare them internationally, developing a comprehensive and objective understanding of modern China while engaging globally. They are familiar with international norms and have a broad global perspective. Graduates should possess good literacy in humanities, professional ethics, social responsibility, and environmental awareness, as well as a concept of sustainable development. They should be capable of handling their positions competently and actively serving their industries and society, becoming qualified constructors of socialist undertakings and reliable successors.

(2) Professional Competence

Graduates should possess the ability to proficiently apply specialized knowledge in their disciplines and utilize modern tools. They should demonstrate innovative spirit, with the capability to conduct scientific research, design, and development of new materials, technologies, and processes. Additionally, they should have engineering skills for equipment transformation and upgrading. They should be able to comprehensively analyze and research complex engineering problems in the field of advanced materials science and engineering, and propose solutions.

(3)Career Orientation

Graduates should be familiar with the current status and trends of industry development, and capable of participating in or independently engaging in material research, process design, technological development, market expansion, development planning, production, and business management in the field of advanced materials science and engineering. Graduates have the capability to pursue further studies at world-renowned universities or to work for globally renowned companies and international organizations.

(4) Social Skills

Graduates should have a high level of English proficiency, capable of proficiently reading professional English materials, engaging in professional writing, and technical communication in English. Graduates should have excellent communication skills, interpersonal skills, and teamwork abilities. They are able to effectively collaborate in cross-cultural and interdisciplinary teams, playing a pivotal role as technical backbone or primary leaders.

(5) Self-development

Graduates should have innovative thinking, awareness, and capabilities, equipped with the ability to identify, analyse, and solve problems. They possess strong lifelong learning abilities, capable of continuously learning, adapting, and creating new ideas, methods, and products in ever-changing environments. In both learning and practice, they are brave in exploration and daring in innovation, driving technological innovation and social development.

2.1.3 Ideological Education

Implement the fundamental task of establishing virtues and educating people, use the thought of socialism with Chinese characteristics in the new era to shape the soul and educate people, and strive to cultivate students to become chief engineers who embody patriotism, humility, pragmatism, inclusiveness, steady accumulation, and vigorous development, all while serving the nation. By making full use of the wide application and strong practical characteristics of materials science and engineering, bridge the module knowledge to national major projects and personage deed through in-class and extracurricular diversified teaching methods, as well as new media carriers to strengthen the guidance of value and foster the ideological and political education through the whole process of teaching. It is necessary to not only make the teaching vivid, but also to make the process of ideological and political moral education concrete so as to convince people with reasonable facts. Guide teachers to align with human development and social progress, national strategies, and technological frontiers, delve into the education elements within the curriculum, and achieve a deep integration of education with professional teaching. Guide students to establish patriotism while teaching them solid professional knowledge in order to improve students' ideological and moral sentiments, enhance their sense of social responsibility and mission to serve the country and the people, as well as to improve their understanding of the relationship between individuals and society, individuals and nature, and to grasp the concepts and implications of engineering ethics and sustainable development.

2.1.4 Graduation Requirements (Core Abilities of Students)

2.1.4.1 Engineering Knowledge：students will master mathematics, natural science, engineering fundamentals, and professional knowledge required for Materials science and Engineering. Students will have the ability to apply that knowledge to solve complex engineering problems in the design, synthesis, processing, and application of materials.

(1) Students will have the ability to use the terminology of mathematics, natural science, and engineering science to express complex engineering problems in the field of materials science and engineering.

(2) Students will have the ability to establish and solve mathematical models for specific processes related to the preparation, processing, and application in the field of materials science and engineering.

(3) Students will have the ability to apply mathematics, natural science, engineering fundamentals, and professional knowledge to derive and analyse complex engineering problems in the field of materials science and engineering.

(4) Students will have the ability tocompare and synthesize engineering fundamentals and professional knowledge with mathematical modeling methods for solutions to complex engineering problems in the field of materials science and engineering.

2.1.4.2 Problem Analysis: students will have the ability to use the basic principles of mathematics, natural sciences and engineering sciences to identify and express complex engineering problems of material composition, structure, production processes and related equipment of materials and their products, obtaining effective conclusions through literature research and analysis.

(1) Students will have the ability in utilizing relevant scientific principles to identify and judge key issues in the synthesis, modification, moulding and processing, performance testing and engineering applications of materials.

(2) Students will have the ability in refining and modelling complex engineering problems in the synthesis, modification, moulding and processing, performance testing and engineering applications of materials, clarifying key stages and parameters.

(3) Students will have the ability in refining, analyzing and evaluate complex engineering problems in the field of materials, rationalizing, optimizing and improving solutions.

(4) Students will have the ability to search and analyze literature, and apply effective information to solve complex engineering problems in the preparation, processing and application of materials.

2.1.4.3 Design/Development of Solutions: students will have the ability to propose solutions to complex engineering problems in the production and processing of materials and the regulation of their properties, developing designs for processes and advanced material products to meet specific needs, demonstrating innovation in the design process and considering social, health, safety, legal, cultural and environmental factors.

(1) Students will master relevant design/development principles, methods and techniques in the field of materials, and understand factors affecting design objectives and technical solutions.

(2) Students will have the ability to design and develop solutions to complex problems in the field of materials and select appropriate processing and equipment for specific needs.

(3) Students will have the ability to systematically integrate relevant processes in the preparation, processing and application of materials, demonstrating a sense of innovation in solutions to complex engineering problems, and figuring out solutions under various constraints.

(4) Students will have the ability of taking safety, health, legal, cultural and environmental constraints into consideration during the design, development and solving of complex engineering problems in materials.

2.1.4.4 Research: students will have the ability to conduct research based on scientific principles and using scientific methods on complex engineering problems in the process of research and development, production and processing of materials, with abilities in experimental design, implementation, product testing, data analysis, and synthesizing relevant information to reach reasonable and effective conclusions.

(1) Students will have the ability to research and analyze complex engineering problems in the R&D and production of materials using scientific methods based on fundamental principles and professional knowledge in natural sciences and materials fields, combined with literature review.

(2) Students will have knowledge in basic synthesis, characterization, moulding processing and performance testing methods and experimental operation skills, with the ability in choosing research methods and designing experimental programmes.

(3) Students will have the ability to build an experimental set-up or experimental platform,

carrying out experiments safely, and collecting experimental data correctly according to the research programme and methods.

(4) Students will have the ability to analyze and interpret experimental results and synthesize information to reach reasonable and valid conclusions, and engage in interdisciplinary and cutting-edge research exploration.

2.1.4.5 Use of Modern Tools: Students will have the ability to develop, select and use appropriate technologies, resources, modern information technology tools and engineering tools for complex engineering problems in the design, synthesis, moulding and processing of materials, predicting and simulating relevant complex engineering problems and understanding their limitations.

(1) Students will understand the working principles and methods of modern instruments, engineering tools, IT tools and simulation software commonly used in materials science and engineering field, understanding their application areas.

(2) Students will have the ability to select and use appropriate techniques, methods and modern tools to analyse, calculate and design the structure and properties of materials, solving complex engineering problems in the preparation, processing and application of materials.

(3) Students will have the ability to develop or select modern tools for the simulation and prediction of complex engineering problems in the preparation, processing and moulding, as well as in the structure and properties of materials and their products, controlling parameters and regulating performance, understanding their limitations.

2.1.4.6 Engineering and Society: students will understand the laws and regulations related to the preparation, production and moulding processing of materials, will have the ability in analyzing engineering practice scenarios based on a background knowledge of engineering related to materials, evaluating the social, health, safety, legal, and cultural impacts of materials science and engineering practice and solutions to complex engineering problems, and understanding the responsibilities involved.

(1) Students will have basic knowledge of technical standards, intellectual property rights, environmental safety, laws and regulations in the preparation, production and moulding process of materials, and have the initial ability to deal with crises and emergencies.

(2) Students will have experiences in engineering and social practices related to materials, and

the ability in analyzing and evaluating the social, health, safety, legal and cultural impacts of materials science and engineering practices and solutions to complex engineering problems, as well as understanding the responsibilities to be assumed.

2.1.4.7 Environment and sustainable development: Have a strong awareness of environmental protection and sustainable development based on the characteristics of materials, and be able to understand and evaluate the influences of engineering practices on complex material engineering problems to the environment and sustainable development of society.

(1) Know and understand the concept and connotation of environmental protection and sustainable development, understand policies and legal regulations related to environmental protection at the national and various levels; be capable of understanding and evaluating the impact of engineering practices on complex material engineering problems on the environment.

(2) Have strong sense of sustainable development, being aware of the national strategy of sustainable development. Correctly understand and evaluate the impact of engineering practices on complex engineering problems in the field of materials on the sustainable development of society.

2.1.4.8 Professional ethics: Possess a sense of patriotism, humanities and social science literacy, and social responsibility. Capable of understanding and adhering to engineering professional ethics and standards in materials science and engineering practices, and also fulfilling responsibilities.

(1) Have a correct world view, outlook on life and values, possessing a sense of patriotism, humanistic knowledge, scientific literacy, and social responsibility.

(2) Understand the engineering professional ethics and norms of honesty, fairness andintegrity, and consciously abide them in engineering practices. Understand the responsibility of materials science and engineering professional engineers to the public's safety, health and welfare, and the ecological environment, and consciously fulfill duties in engineering practice.

2.1.4.9 Individual and team: Possess team collaboration abilities, understand the significance and role of teams in a multidisciplinary context ,and the positioning and responsibilities of each role in the team, capable of taking on the roles of an individual, team member, and leader within a team.

(1) Possess team spirit, understand the significance and role of team collaboration under multidisciplinary integration. Capable of effectively communicating with members of other disciplines within the team. Capable of working independently or in cooperation within the team.

(2) Understand the positioning and responsibilities of each role in the materials research and

development team, and production team.Actively take on the roles of an individual, team member, and leader within the team, collaborate with team members to complete tasks, possessing the ability to organise and manage a team.

2.1.4.10 Communication: Capable of effectively communicating and exchanging views on issues related to materials science and engineering with peers both domestically and internationally and with the general public, including writing reports, making statements, clearly expressing or responding to instructions, and possessing a certain international outlook and cross-cultural background learning, communication, and exchange abilities.

(1) Capable of accurately describing and clearly expressing complex engineering problems related to materials science and engineering through drawings, reports, design manuscripts, speeches, and defences in both written and oral forms, understanding the differences in communication and exchange on complex engineering problems with industry peers and the general public.

(2) Possess strong language expression abilities and foreign language listening, speaking, reading, and writing abilities, capable of basic communication, exchange, and cooperation on the research, development, design, and application of materials in a cross-cultural context, understanding domestic and international development trends, research hotspots in the field, understanding and respecting the differences and diversity of cultures around the world.

2.1.4.11 Project management: Understand and master the principles of engineering management and economic decision-making methods, have engineering practice experience, and apply them in solving complex synthesis, processing, and engineering application problems of materials in a multidisciplinary environment.

(1) Have engineering practice learning experiences, understand and master important engineering management principles and economic decision-making methods involved in materials science engineering activities.

(2) Capable of applying related engineering management principles and economic decision-making methods in engineering activities in a multidisciplinary environment, using engineering management and economic decision-making methods in the process of designing and developing solutions in the field of materials science and engineering.

2.1.4.12 Lifelong learning: Possess the awareness of self-learning and lifelong learning, with

the ability to continuously learn and adapt to development.

(1) Have good mental and physical health, Capable of recognising the necessity and importance of continuous learning, possessing the awareness of self-learning and lifelong learning.

(2) Capable of continuously learning and adapting to the needs of personal and industry development, including the ability to understand complex engineering problems, analyse, summarise, and pose questions in the field of materials science and engineering.

2.1.5 Qualification and Degree Certificate

Official length of the programme: 4+0 years' study in accordance with the credit management system, the maximum length of study shall not exceed 6 years.

Qualification and certificate: After students have successfully passed all modules and meet the graduation requirements of two universities, they will be awarded diploma by NPU, BEng degree by NPU, and BEng degree by QMUL.

2.1.6 Credits and Hours

Total credits:172+X credits

Includes:

Type of module	Credits
General education modules	84
Technical discipline modules	88
Total credits	172
Personality Development Modules	6
Extension practices	

2.1.7 Curriculum Structure and Credits

The total credits for the Materials Science and Engineering major (080401H) are 172, with a total study time of 2974 hours. The distribution of credits for the modules is as follows:

Number of modules from QMUL introduced	21	Total number of modules	53	Percentage	39.6%
Number of core modules from QMUL introduced	18	Total number of core modules	25	Percentage	72%

Number of core modules taught by QMUL lecturers	18	Total number of modules	53	Percentage	34%
Hours for core modules taught by QMUL lecturers	1016	Total hours for modules	2974	Percentage	34.1%

(General education modules and technical discipline modules: 172 credits； Personality Development Modules and extension practices : X credits)

2.1.7.1 General education modules 84credits

1). General Studies modules

Aesthetics and Art modules 4 credits

Module Code	Module Name	Credit	Hour	Category	Note
U30G11001	College aesthetic education	2	32	Compulsory module	
U30G11002	Art appreciation	2	32	Elective compulsory	Art history modules
U30G12001	The Path of Chinese Aesthetics(Eng)	2	32		
U30G11020	Appreciation Course of Classical Poetry and Music	2	32		Music modules
U30G11007	Appreciation of Drama	2	32		Drama modules
U30G11008	Appreciation of Chinese Opera	2	32		
U30G11022	Beijing opera	2	32		
U30G11016	The beauty of Chinese literature and art	2	32		Literature modules
U30G11005	Film and Television Appreciation	2	32		Film and television modules
U30G11018	Video China-Documentary and Cross-cultural Communication	2	32		
U30G11021	Mural Art Workshop	2	32		Art modules
see the current semester modules					Dance modules
see the current semester modules					Art design modules

All students should take the compulsory module—college aesthetic education (2 credits) and at least 2 credits in the other eight elective compulsory modules designated by the Ministry of Education.

Civilization and Technology, Innovation and Entrepreneurship, Management and Leadership, Global Perspectives, Ecology and Sustainable Development, Writing and Communication," each

module worth 6 credits. Please refer to the module offerings for the current semester for specific details.

Module Code	Module Name	Credit	Hour	Category
	Civilization and Technology	6	96	Elective compulsory
	Innovation and Entrepreneurship			
	Management and Leadership			
	Global Vision			
	Ecology and Sustainable Development			
	Writing and Communication			

Note: Students can choose modules from one or more categories listed above and should take at less 6 credits. The module list in each semester will be published by the University.

2) Public Basic Modules

(1) Ideological and political theory modules 18 credits

Module Code	Module Name	Credit	Hour	Category
U13G11007	Marxism General Principle	2.5	40	Compulsory
U44G11004	Fundamental of Mao Ze Dong Thoughts	2.5	40	Compulsory
U44G11001	Essentials of Chinese Modern History	2.5	40	Compulsory
U13G11012	Ethics and Fundamental of Law	2.5	40	Compulsory
U44G21001	Ideological and Political Practice	2	32	Compulsory
U44G11013	Situation and Policy（1）	0.5	8	Compulsory
U44G11014	Situation and Policy（2）	0.5	8	Compulsory
U44G11015	Situation and Policy（3）	0.5	8	Compulsory
U44G11016	Situation and Policy（4）	0.5	8	Compulsory
U44G11009	Outline of Xi Jinping Thought on Socialism with Chinese Characteristics for a New era	3	48	Compulsory
U44G11003	History of the Communist Party of China	1	16	Elective compulsory
U44G11012	History of the People's Republic of China	1	16	
U44G11005	History of Reform and Opening Up	1	16	
U44G11011	History of the Development of Socialism	1	16	

Students much take all compulsory modules listed in the above, in total 18 credits. Situation and Policy (1)(2)(3)(4) four modules must be taken in 4 academic years (Semester 1 to Semester 7) respectively with 8 hours (0.5 credit) in each year, in total 32 hours (2 credits). Students must choose to study at least one module from the modules "History of the Communist Party of China", "History of the People's Republic of China", "History of Reform and Opening Up" and "History of the Development of Socialism", and take at least 1 credit.

(2) Military modules 4 credits

Module Code	Module Name	Credit	Hour	Category
U34G11005	Military Theory	2	32	Compulsory
U34P41002	Military Training	2	32	Compulsory

(3) Sports and Mental health modules 6 credits

Module Code	Module Name	Credit	Hour	Category
U34G11004	Students Mental Health Education	2	32	Compulsory
	For specific programme modules, see the current semester modules offered by the Physical Education Department	4	128	Elective compulsory

Students can freely choose different modules according to their majors, physical conditions, interests and physical basis. Students must meet the 421X standard of school physical education qualification upon graduation, that is, complete 4 credits; students should be proficient in 2 sports skills and obtain a skill certificate (one of which is swimming); during the undergraduate period, students can study physical quality development module according to their personal interests and obtain X credits. Students are suggested to choose sports modules during first 4 semesters.

(4) National Security Education 1 credit

National security education is a compulsory public fundamental module with the requirements of attending no less than 1 credit (2 hours) in one academic year. The module list in each semester will be published by the University.

(5) Language modules 8 credits

Module Code	Module Name	Credit	Hour	Category
UQMG12211/ QXU3103	English for Science and Engineering	4	64	Compulsory
QXU3104	Communication in Science and Engineering	4	64	Compulsory

(6) Mathematics and Natural Science 37 credits

Module Code	Module Name	Credit	Hour	Category
NXC3000	Advanced Math 1	5.5	88	Compulsory
NXC3004	Advanced Math 2	5.5	88	Compulsory
NXC3002	Linear Algebra	3	48	Compulsory
NXC3005	Mathematical Modelling and Computing	4	64	Compulsory
NXC3001	General Physics	5	82	Compulsory
QXU4004	Engineering Chemistry	3.5	56	Compulsory
NXC4012	Mechanical Modelling	3.5	56	Compulsory
NXC4022	Thermodynamics and Phase Transformations	3.5	56	Compulsory
QXU5010	Surfaces and Interfaces	3.5	56	Compulsory

2.1.7.2 Technical discipline Modules 88 credits

(1) Interdisciplinary Platform Modules 10.5 credits

Module Code	Module Name	Credit	Hour	Category
QXU3112	Academic and Professional Engineering Skills	3.5	56	Compulsory
UQMM12220/ QXU4112	Developing Professional Engineering Skills	3.5	56	Compulsory
UQMM12230/ QXU5112	Business and Professional Skills in Engineering	3.5	56	Compulsory

(2) Discipline Elementary Modules 14 credits

Module Code	Module Name	Credit	Hour	Category
QXU4016	Engineering Design Methods	3.5	56	Compulsory
QXU4015	Engineering Materials	3.5	56	Compulsory
QXU4000	Materials Science 1-structure and properties	3.5	56	Compulsory
QXU4006	Materials Science 2-processing and applications	3.5	56	Compulsory

(3) Discipline Core Modules 29 credits

Module Code	Module Name	Credit	Hour	Category
QXU4002	Chemistry for Materials	4	64	Compulsory
NXC5015	Structural Characterisation	3.5	56	Compulsory
NXC5026	Metals I-Deformation and Strengthening	3.5	56	Compulsory
QXU5030	Composite Materials	3.5	56	Compulsory

QXU5032	Physical Properties of Polymers	4	64	Compulsory
NXC5036	Metals II-Alloy Systems and Heat Treatment	3.5	56	Compulsory
QXU6004	Materials Selection in Engineering Design	3.5	56	Compulsory
QXU6008	Materials and Sustainability	3.5	56	Compulsory

(4) Discipline Elective Module 14.5 credits

Module Code	Module Name	Credit	Hour	Category
QXU6032	Advanced Ceramic and Glass Materials	3.5	56	Elective compulsory
NXC6029	Fracture, Fatigue and Creep	4	64	Elective compulsory
NXC6025	Manufacturing Processes	4	64	Elective compulsory
QXU6027	Renewable Energy Technology	3	48	Elective compulsory

(5) Comprehensive Practice 10 credits

Students can participate in a variety forms of scientific research training including innovation and entrepreneurship programme and experiment, academic competition, and scientific research project. Students are also encouraged to participate in a variety forms of practice such as overseas practice, international internship, winter and summer schools. Education on labour replies on industrial practice (10 hours) and summer school (6 hours).

Module Code	Module Name	Credit	Hour	Category
QXU4007	Experiments in Materials 1	3.5	56	Compulsory
QXU5017	Experiments in Materials 2	3.5	56	Compulsory
NXC0001	Scientific Research	1	16	Compulsory
NXC0002	Production Practice	2	32	Compulsory

(6) Final project/Thesis for Graduation 10 Credits

Module Code	Module Name	Credit	Hour	Category
QXU6030	Materials Project	10	160	Compulsory

This project/thesis also supports education on labour with 16 hours to guide students to develop their labor habits and correct labor values.

2.1.7.3 Personality Development Modules (6 credits, at least 3 modules)

Students are encouraged to choose the modules taught in English and from the following categories based on their own development and interests.

(1) Comprehensive Literary Module

It is suggested that students should choose the modules taught in English from the following four categories. The module list in each semester will be published by the University.

A. Scientific literacy modules: subjects on natural science such as introduction to aeronautics, astronautics and navigation, environment, biology, etc.

Module Code	Module Name	Credit	Hour	Category
NXC1011	Engineering Literacy-Basic Engineering Practice	2	32	Elective
NXC1012	Engineering Literacy—Teaching and Innovative Practice of Intelligent Robot System	2	32	Elective
Details of the above-mentioned modules offered each semester can be found in the course selection handbook for the respective semester.				

B. Modules on economics, management and law: including economy, management, legal education, etc.

C. Humanities modules: including philosophy, ethics, history, culture, language, literature, society, aesthetics, life and development, etc.

Module Code	Module Name	Credit	Hour	Category
NXC1008	History of Western Philosophy	2	32	Elective
Details of the above-mentioned modules offered each semester can be found in the course selection handbook for the respective semester.				

D. Art literacy modules:

Module Code	Module Name	Credit	Hour	Category
UQML21009	Wine Culture and Tasting Art	1	16	Elective
Details of the above-mentioned modules offered each semester can be found in the course selection handbook for the respective semester.				

Discipline Extension Module

Module Code	Module Name	Credit	Hour	Category
UQML11006	Biochemistry	2	32	Elective
UQML11005	Analytical Chemistry	2	32	Elective
NXC1005	Inorganic Chemistry	2	32	Elective
NXC1006	Fundamentals of Organic Chemistry	2	32	Elective
NXC1007	Physical Chemistry	2	32	Elective
NXC1013	Introduction to Quantum Mechanics	2	32	Elective
NXC1014	Instrumental Analysis	2	32	Elective
Details of the above-mentioned modules offered each semester can be found in the course selection handbook for the respective semester.				

It includes all modules set up by other Schools and major categories.

(3) Advanced Academic Module

It includes general modules offered by the University and postgraduate modules. Credits beyond the ones required by the education plan of the programme can be included in this category.

Module Code	Module Name	Credit	Hour	Category
NXC1015	Interpersonal and Communication Skills	2	32	Elective
UQML11007	Introduction of Solid State Physics	2.5	40	Elective
UQMM11008	The Structure and Properties of Polymers	2	32	Elective
UQMG11001	Introduction to Fuel Cell	1	16	Elective
UQML11009	Service Characteristics of Materials Under Extreme Conditions	2	32	Elective
UQML21010	Improving Your Study Skills	1	16	Elective
UQMM11001	Advanced Materials Science and Engineering	1.5	24	Elective
UQMM12002	Multiscale Modeling and Simulation of Materials	2	32	Elective

2.1.7.4 Extension Practices

To encourage students to participate in all kinds of activities linked with ideological education activities, public benefit activities, innovation and entrepreneurship activities, recreational activities, labor Practice, social practice activities. The activities list will be published.

2.1.8 The Support matrix of curriculum system, aims of programme and graduation requirements

General Education Modules

Module Category	Module Name	Aims of Programme					Graduation Requirements																															
		1	2	3	4	5	1				2				3				4				5			6		7		8		9		10		11		12	
							1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	4.1	4.2	4.3	4.4	5.1	5.2	5.3	6.1	5.2	7.1	6.2	8.1	8.2	9.1	9.2	10.1	10.2	11.1	11.2	12.1	12.2
Ideological and political theory modules	Ethics and Fundamental of Law	√																								0.1												
	Introduction to Mao Zedong Thoughts and the Theoretical System of Socialism with Chinese Characteristics	√																								0.1												
	Outline of Xi Jinping Thought on Socialism with Chinese characteristics for a new era	√																								0.1												
	Essentials of Chinese Modern History	√																								0.1												
	Marxism General Principle	√																								0.1												

Module Category	Module Name	Aims of Programme					Graduation Requirements																															
		1	2	3	4	5	1				2				3				4				5			6		7		8		9		10		11		12	
							1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	4.1	4.2	4.3	4.4	5.1	5.2	5.3	6.1	5.2	7.1	6.2	8.1	8.2	9.1	9.2	10.1	10.2	11.1	11.2	12.1	12.2
	Ideological and Political Practice	√																								0.1													
	Situation and Polic1-4	√																								0.1													
	History of the Communist Party of China	√																								0.1													
	History of Reform and Opening Up	√																								0.1													
	History of the Development of Socialism	√																								0.1													
	History of the People's Republic of China	√																								0.1													
Military Module	Military Theory	√																												0.3								
	Military Training	√																												0.3								
Sports and Mental Health Module	Students Mental Health Education	√																																			0.1	

Module Category	Module Name	Aims of Programme					Graduation Requirements																																			
		1	2	3	4	5	1				2				3				4				5			6		7		8		9		10		11		12	
							1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	4.1	4.2	4.3	4.4	5.1	5.2	5.3	6.1	5.2	7.1	6.2	8.1	8.2	9.1	9.2	10.1	10.2	11.1	11.2	12.1	12.2
	physical education	√																																				0.1	
Aesthetics and Art Module	College aesthetics Education	√				√																																	0.1
	Limited art Elective	√				√																																	0.1
Language Module	English for Science and Engineering				√																								0.1		0.1		0.2	0.3			0.2	
	Communication in Science and Engineering				√									0.3																			0.3	0.3			0.2	
Mathematics and Natural	Advanced Math 1		√				0.15																																
	Advanced Math 2		√				0.15																																
	Linear Algebra		√					0.3																															
	Mathematical Modelling and Computing		√				0.15	0.3																															

Module Category	Module Name	Aims of Programme					Graduation Requirements																																			
		1	2	3	4	5	1				2				3				4				5			6		7		8		9		10		11		12	
							1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	4.1	4.2	4.3	4.4	5.1	5.2	5.3	6.1	5.2	7.1	6.2	8.1	8.2	9.1	9.2	10.1	10.2	11.1	11.2	12.1	12.2
	General Physics		√				0.15													0.2																			
	Engineering Chemistry		√	√	√		0.2				0.1										0.3					0.1						0.1		0.1					
	Mechanical Modelling		√	√				0.2							0.2				0.2																			
	Thermodynamics and Phase Transformations		√	√					0.2			0.25												0.4															
	Surfaces and Interfaces		√	√							0.15					0.2							0.2	0.3															
National Security Education	See modules offered in the current semester				√																					0.1													
Civilization and Technology					√																									0.4									
Innovation and Entrepreneurship					√																																	0.3
Management and Leadership				√																															0.25				

Module Category	Module Name	Aims of Programme					Graduation Requirements																															
		1	2	3	4	5	1				2				3				4				5			6		7		8		9		10		11		12	
							1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	4.1	4.2	4.3	4.4	5.1	5.2	5.3	6.1	5.2	7.1	6.2	8.1	8.2	9.1	9.2	10.1	10.2	11.1	11.2	12.1	12.2
Global Vision						√																																0.2
Ecology and Sustainable Development			√		√																							0.3										
Writing and Communication				√																														0.1					

Technical discipline Modules

Module Category	Module Name	Aims of Programme					Graduation Requirements																																			
		1	2	3	4	5	1				2				3				4				5			6		7		8		9		10		11		12	
							1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	4.1	4.2	4.3	4.4	5.1	5.2	5.3	6.1	5.2	7.1	6.2	8.1	8.2	9.1	9.2	10.1	10.2	11.1	11.2	12.1	12.2
Interdisciplinary Platform Modules	Academic and Professional Engineering Skills		√	√																		0.3	0.2									0.2						0.2	
	Developing Professional Engineering Skills		√	√														0.25												0.3		0.3			0.2				
	Business and Professional Skills in Engineering			√	√																						0.3			0.3	0.3					0.3				
Discipline Elementary Modules	Engineering Design Methods		√	√	√										0.2	0.2	0.3	0.25																						
	Materials Science 1-structure and properties		√	√	√				0.1		0.1		0.2																											
	Materials Science 2-processing and applications		√	√	√			0.2			0.15			0.3			0.2																						
	Engineering Materials		√	√							0.1		0.2		0.2																		0.1							
Discipline Core Modules	Chemistry for Materials		√	√	√						0.15					0.2																	0.2							
	Physical Properties of Polymers		√	√	√				0.1				0.2																			0.2							

Module Category	Module Name	Aims of Programme					Graduation Requirements																																			
		1	2	3	4	5	1				2				3				4				5			6		7		8		9		10		11		12	
							1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	4.1	4.2	4.3	4.4	5.1	5.2	5.3	6.1	5.2	7.1	6.2	8.1	8.2	9.1	9.2	10.1	10.2	11.1	11.2	12.1	12.2
	Structural Characterisation		√	√	√							0.25			0.2					0.3				0.3																
	Metals I-Deformation and Strengthening		√	√	√					0.2									0.2																0.1				
	Metals II-Alloy Systems and Heat Treatment	√	√	√								0.25							0.3						0.5				0.3								0.3			
	Composite Materials		√	√	√				0.2				0.2			0.15						0.4																		
	Materials Selection in Engineering Design			√	√	√					0.1				0.2	0.15																0.2								
	Materials and Sustainability	√		√	√													0.25									0.4	0.3				0.3								
Discipline Elective Module	Manufacturing Processes		√	√	√					0.2				0.2			0.2				0.3																0.4			

Module Category	Module Name	Aims of Programme					Graduation Requirements																																	
		1	2	3	4	5	1				2				3				4				5			6		7		8		9		10		11		12	
							1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	4.1	4.2	4.3	4.4	5.1	5.2	5.3	6.1	5.2	7.1	6.2	8.1	8.2	9.1	9.2	10.1	10.2	11.1	11.2	12.1	12.2
	Fracture, Fatigue and Creep	√		√	√					0.2										0.2					0.5		0.3										0.3		
	Advanced Ceramic and Glass Materials		√	√			0.2			0.2				0.2			0.3																						
	Renewable Energy Technology	√	√	√							0.15		0.2			0.1													0.1										
Comprehensive Practice	Scientific Research Training			√	√	√																						0.3											
	Production Practice		√	√	√	√																	0.3				0.4		0.3										
	Experiments in Materials 1			√	√				0.2										0.3												0.2		0.1				0.2	
	Experiments in Materials 2			√	√				0.2											0.3		0.3										0.3			0.25			0.3
Design/ Thesis for Graduation	Materials Project		√	√						0.2		0.25						0.25			0.4		0.3											0.3					

2.1.9 Instructive Teaching Plan

Instructive Teaching Plan

The Instructive Teaching Plan of Materials Science and Engineering for Undergraduates of Grade 2025

Year 1 Autumn Semester (credits≥30)							
Module	Module Category	Module Code	Module Name	Category	Credit	Hour	Note
General Education	Ideological and political theory modules	U13G11012	Ethics and Fundamental of Law	Compulsory	2.5	40	Open in autumn and spring semesters. Suggest to complete in Year 1 Autumn Semester.
		U44G11013	Situation and Policy（1）	Compulsory	0.5	8	
	Military modules	U34G11005	Military Theory	Compulsory	2	36	
		U34P41002	Military Training	Compulsory	2	120	
	Sports and Mental health modules	See the list published in the current semester	Physical Education	Elective compulsory	1	32	It includes in-class 36 hours and off-class 4 hours. In-class 36 hours includes 32 specific PE classes and 4 theory hours. Off-class 4 hours includes physique test. It includes 16 hours of physical fitness class, 1 hour once a week, from Monday to Friday afternoon 16:00-16:45,16:55-17:40,19:00-19:45,19:55-20:40 any time period;

Year 1 Autumn Semester (credits≥30)							
Module	Module Category	Module Code	Module Name	Category	Credit	Hour	Note
							Long run (3.2 km (male)/2.4 km(female) , 5 times a week, 32 times per semester.
	Language modules	UQMG12211/QXU3103	English for Science and Engineering	Compulsory	4	64	
	Mathematics and Natural Science	NXC3000	Advanced Mathematics 1	Compulsory	5.5	88	
		NXC3001	General Physics	Compulsory	5	82	
		NXC3002	Linear Algebra	Compulsory	3	48	
	Security education	See the list published in the current semester	National security education	Compulsory	1	16	National security education is a compulsory public fundamental module with the requirements of attending no less than 1 credit (2 hours) in one academic year.
	Civilization and Technology	See the list published in the current semester		Elective compulsory	2	32	Before the autumn semester of the fourth academic year, students must have completed at least 6 credits. Specific courses can be found in the course offering list of the current
	Innovation and Entrepreneurship						
	Management and Leadership						
	Global Vision						
	Ecology and Sustainable Development						

Year 1 Autumn Semester (credits≥30)							
Module	Module Category	Module Code	Module Name	Category	Credit	Hour	Note
	Writing and Communication						semester.
Technical discipline modules	Interdisciplinary Platform Module (including lab session technical project)	QXU3112	Academic and Professional Engineering Skills	Compulsory	1.5 /3.5	24 /56	Year-long module
Total hours/ credits	≥586/30						
Personality Development Modules (elective)	Students are encouraged to choose the modules based on their own development and interests from comprehensive modules, extension modules. Complete 6 credits before graduation. Students are suggested to choose the modules taught in English from NPU and QMES elective module list published in the semester.						
Extension practices	To encourage students to participate in all kinds of activities linked with ideological education activities, public benefit activities, innovation and entrepreneurship activities, recreational activities, social practice activities. The activities list will be published.						

Year 1 Spring Semester（≥30.5）							
Module	Module Category	Module Code	Module Name	Category	Credit	Hour	Note
General Education	Ideological and political theory modules	U44G11001	Essentials of Chinese Modern History	Compulsory	2.5	40	Open in autumn and spring semesters. Suggest to complete in Year 1 Spring Semester.
	Sports and	U34G11004	Students Mental Health Education	Compulsory	2	32	

Year 1 Spring Semester（≥30.5）							
Module	Module Category	Module Code	Module Name	Category	Credit	Hour	Note
	Mental health modules	See the list published in the current semester	Physical Education	Elective compulsory	1	32	It includes in-class 36 hours and off-class 4 hours. In-class 36 hours includes 32 specific PE classes and 4 theory hours. Off-class 4 hours includes physique test. Long run (3.2 km (male)/2.4 km(female)5 timies a week, 32 times per semester.
	Aesthetics and Art modules	See the list published in the current semester	Eight elective modules designated by the Ministry of Education.	Elective compulsory	2	32	Complete at least 2 credits of courses from the eight categories of restricted art elective modules. For specific courses, please refer to the current term's published course list; these must be completed before graduation.

Year 1 Spring Semester（≥30.5）							
Module	Module Category	Module Code	Module Name	Category	Credit	Hour	Note
	Language modules	QXU3104/ UQMG12212	Communication in Science and Engineering	Compulsory	4	64	
	Mathematics and Natural Science	NXC3004	Advanced Mathematics 2	Compulsory	5.5	88	
		QXU4004	Engineering Chemistry	Compulsory	3.5	56	
		NXC3005	Mathematical Modelling and Computing	Compulsory	4	64	
	Civilization and Technology	See the list published in the current semester		Elective compulsory	1	16	Suggest to take 1 credit from these categories in this semester and gain 6 credits before graduate.
	Innovation and Entrepreneurship						
	Management and Leadership						
	Global Vision						
	Ecology and Sustainable Development						
	Writing and Communication						
Technical discipline modules	Interdisciplinary Platform Module	QXU3112	Academic and Professional Engineering Skills	Compulsory	2 /3.5	32 /56	Year-long module
	Discipline Elementary Modules	QXU4015	Engineering Materials	Compulsory	3.5	56	

Year 1 Spring Semester（≥30.5）							
Module	Module Category	Module Code	Module Name	Category	Credit	Hour	Note
Total hours/ credits	≥512/30.5						
Personality Development Modules (elective)	Students are encouraged to choose the modules based on their own development and interests from comprehensive modules, extension modules. Complete 6 credits before graduation. Students are suggested to choose the modules taught in English from NPU and QMES elective module list published in the semester.						
Extension practices	To encourage students to participate in all kinds of activities linked with ideological education activities, public benefit activities, innovation and entrepreneurship activities, recreational activities, social practice activities. The activities list will be published.						

Year 2 Autumn Semester（≥24.5）							
Module	Module Category	Module Code	Module Name	Category	Credit	Hour	Note
General Education	Ideological and political theory	U44G11009	Outline of Xi Jinping Thought on Socialism with Chinese Characteristics for a New era	Compulsory	3	48	
		U44G11014	Situation and Policy（2）	Compulsory	0.5	8	Open in autumn and spring semesters. Suggest to complete in Year 2 Autumn Semester.
		U44G11003	History of the Communist Party of China	Elective compulsory	1	16	Open in autumn and spring semesters. At least choose one. Complete at least 1 credit.
		U44G11012	History of the People's Republic of China				
		U44G11005	History of Reform and Opening Up				

Year 2 Autumn Semester（≥24.5）							
Module	Module Category	Module Code	Module Name	Category	Credit	Hour	Note
		U44G11011	History of the Development of Socialism				
	Sports and Mental health modules	See the list published in the current semester	Physical Education	Elective compulsory	1	32	It includes in-class 36 hours and off-class 4 hours. In-class 36 hours includes 32 specific PE classes and 4 theory hours. Off-class 4 hours includes physique test. Long run (3.2 km (male)/2.4 km(female)5 timies a week, 32 times per semester.
	Aesthetics and Art modules	U30G11001	College Aesthetic Education	Compulsory	2	32	
	Civilization and Technology	See the list published in the current semester		Elective compulsory	1	16	Suggest to take 1 credit from these categories in this semester and gain 6 credits before graduate.
	Innovation and Entrepreneurship						

Year 2 Autumn Semester（≥24.5）							
Module	Module Category	Module Code	Module Name	Category	Credit	Hour	Note
	Management and Leadership						
	Global Vision						
	Ecology and Sustainable Development						
	Writing and Communication						
Technical discipline modules	Interdisciplinary Platform Module	UQMM12220/QXU4112	Developing Professional Engineering Skills	Compulsory	1.5/3.5	24/56	Year-long module
	Discipline Elementary Module	QXU4016	Engineering Design Methods	Compulsory	3.5	56	
		QXU4000	Materials Science 1 Structure and Properties	Compulsory	3.5	56	
	Discipline core modules	QXU4002	Chemistry for Materials	Compulsory	4	64	
	Comprehensive Practice	QXU4007	Experiments in Materials 1	Compulsory	3.5	56	
Total hours/ credits	≥376/24.5						
Personality Development Modules (elective)	Students are encouraged to choose the modules based on their own development and interests from comprehensive modules, extension modules. Complete 6 credits before graduation. Students are suggested to choose the modules taught in English from NPU and QMES elective module list published in the semester.						
Extension practices	To encourage students to participate in all kinds of activities linked with ideological education activities, public benefit activities, innovation and entrepreneurship activities, recreational activities, social practice activities. The activities list will be published.						

Year 2 Spring Semester（≥23.5）							
Module	Module Category	Module Code	Module Name	Category	Credit	Hour	Note
General Education	Ideological and political theory	U44G11004	Outline of Mao Zedong's thought of Chinese modern and contemporary history and the theoretical system	Compulsory	2.5	40	
		U44G21001	Ideological and Political Practice	Compulsory	2	32	
		U44G11003	History of the Communist Party of China	Elective compulsory	1	16	Open in autumn and spring semesters. At least choose one. Complete at least 1 credit.
		U44G11012	History of the People's Republic of China				
		U44G11005	History of Reform and Opening Up				
		U44G11011	History of the Development of Socialism				
	Sports and Mental health modules	See the list published in the current semester	Physical Education	Elective compulsory	1	32	It includes in-class 36 hours and off-class 4 hours. In-class 36 hours includes 32 specific PE classes and 4 theory hours. Off-class 4 hours includes physique test. Long run (3.2 km

							(male)/2.4 km(female) 5 timies a week, 32 times per semester.
	Mathematics and Natural Science	NXC4012	Mechanical Modelling	Compulsory	3.5	56	
		NXC4022	Thermodynamics and Phase Transformations	Compulsory	3.5	56	
	Civilization and Technology	See the list published in the current semester		Elective compulsory	1	16	Suggest to take 1 credit from these categories in this semester and gain 6 credits before graduate.
	Innovation and Entrepreneurship						
	Management and Leadership						
	Global Vision						
	Ecology and Sustainable Development						
	Writing and Communication						
Technical discipline modules	Interdisciplinary Platform Module	UQMM12220/ QXU4112	Developing Professional Engineering Skills	Compulsory	2/3.5	32/56	Year-long module
	Discipline elementary modules	QXU4006	Materials Science 2 Processing and Applications	Compulsory	3.5	56	
	Comprehensive Practice	QXU5017	Experiments in Materials 2	Compulsory	3.5	56	

Total hours/ credits	≥392/23.5
Personality Development Modules (elective)	Students are encouraged to choose the modules based on their own development and interests from comprehensive modules, extension modules. Complete 6 credits before graduation. Students are suggested to choose the modules taught in English from NPU and QMES elective module list published in the semester.
Extension practices	To encourage students to participate in all kinds of activities linked with ideological education activities, public benefit activities, innovation and entrepreneurship activities, recreational activities, social practice activities. The activities list will be published.

Year 3 Autumn Semester（≥20.5）							
Module	Module Category	Module Code	Module Name	Category	Credit	Hour	Note
General Education	Ideological and political theory modules	U13G11007	Marxism General Principle	Compulsory	2.5	40	
		U44G11003	History of the Communist Party of China	Elective compulsory	1	16	Open in autumn and spring semesters. At least choose one. Complete at least 1 credit.
		U44G11012	History of the People's Republic of China				
		U44G11005	History of reform and opening up				
		U44G11011	History of the development of socialism				
	Mathematics and Natural Science	QXU5010	Surfaces and Interfaces	Compulsory	3.5	56	
	Civilization and Technology	See the list published in the current semester		Elective compulsory	1	16	Suggest to take 1 credit from these categories in this semester and gain 6 credits before graduate.
	Innovation and Entrepreneurship						

Year 3 Autumn Semester（≥20.5）							
Module	Module Category	Module Code	Module Name	Category	Credit	Hour	Note
	Management and Leadership						
	Global Vision						
	Ecology and Sustainable Development						
	Writing and Communication						
Technical discipline modules	Interdisciplinary Platform Modules	UQMM12230/QXU5112	Business and Professional Skills in Engineering	Compulsory	1.5/3.5	24/56	Year-long module
	Discipline core modules	NXC5026	Metals I-Deformation and Strengthening	Compulsory	3.5	56	
		QXU5032	Physical Properties of Polymers	Compulsory	4	64	
		NXC5015	Structural Characterisation	Compulsory	3.5	56	
Total hours/ credits	≥328/20.5						
Personality Development Modules (elective)	Students are encouraged to choose the modules based on their own development and interests from comprehensive modules, extension modules. Complete 6 credits before graduation. Students are suggested to choose the modules taught in English from NPU and QMES elective module list published in the semester.						
Extension practices	To encourage students to participate in all kinds of activities linked with ideological education activities, public benefit activities, innovation and entrepreneurship activities, recreational activities, social practice activities. The activities list will be published.						

Year 3 Spring Semester（≥19.5）							
Module	Module Category	Module Code	Module Name	Category	Credit	Hour	Note
General Education	Ideological and political theory modules	U44G11015	Situation and Policy（3）	Compulsory	0.5	8	Open in autumn and spring semesters. Suggest to complete in Year 3 Spring Semester.
		U44G11003	History of the Communist Party of China	Elective compulsory	1	16	Open in autumn and spring semesters. At least choose one. Complete at least 1 credit.
		U44G11012	History of the People's Republic of China				
		U44G11005	History of reform and opening up				
		U44G11011	History of the development of socialism				
	Sports and Mental health modules		Physical Education	Elective			1.Obtain X sports quality credits; 2. Extracurricular 4-class-hour physical fitness test
Technical discipline modules	Interdisciplinary Platform Modules	UQMM12230/QXU5112	Business and Professional Skills in Engineering	Compulsory	2/3.5	32/56	Year-long module
	Discipline core modules	QXU5030	Composite Materials	Compulsory	3.5	56	
		NXC5036	Metals II-Alloy Systems and	Compulsory	3.5	56	

Year 3 Spring Semester（≥19.5）							
Module	Module Category	Module Code	Module Name	Category	Credit	Hour	Note
			Heat Treatment				
		QXU6008	Materials and Sustainability	Compulsory	3.5	56	
	Discipline Elective Module	QXU6032	Advanced Ceramic and Glass Materials	Compulsory	3.5	56	
	Comprehensive Practice	NXC0002	Production Practice	Compulsory	2	80	
Total hours/ credits	≥376/19.5						
Personality Development Modules (elective)	Students are encouraged to choose the modules based on their own development and interests from comprehensive modules, extension modules. Complete 6 credits before graduation. Students are suggested to choose the modules taught in English from NPU and QMES elective module list published in the semester.						
Extension practices	To encourage students to participate in all kinds of activities linked with ideological education activities, public benefit activities, innovation and entrepreneurship activities, recreational activities, social practice activities. The activities list will be published.						

Year 4 Autumn Semester（21）							
Module	Module Category	Module Code	Module Name	Category	Credit	Hour	Note
General Education	Ideological and political theory modules	U44G11016	Situation and Policy（4）	Compulsory	0.5	8	Open in autumn and spring semesters. Suggest to complete in Year 4 Autumn Semester.
	Sports and Mental health modules		Physical Education	Elective			Obtain X sports quality credits

Year 4 Autumn Semester（21）							
Module	Module Category	Module Code	Module Name	Category	Credit	Hour	Note
Technical discipline modules	Discipline core modules	QXU6004	Materials Selection in Engineering Design	Compulsory	3.5	56	
	Discipline Elective Modules	NXC6029	Fracture, Fatigue and Creep	Elective Compulsory	4	64	
		NXC6025	Manufacturing Processes	Elective Compulsory	4	64	
		QXU6027	Renewable Energy Technology	Elective Compulsory	3	48	
	Comprehensive Practice	NXC0001	Scientific Research	Compulsory	1	16	Scientific research training needs affirmation. Knowledge practice and industrial practice cant be affirmed as Scientific research training.
	Final project Design/Thesis for Graduation	QXU6030	Materials Project	Compulsory	5/10	80/160	Year-long module
Total hours/ credits	≥352/21						
Personality Development Modules (elective)	Students are encouraged to choose the modules based on their own development and interests from comprehensive modules, extension modules. Complete 6 credits before graduation. Students are suggested to choose the modules taught in English from NPU and QMES elective module list published in the semester.						
Extension practices	To encourage students to participate in all kinds of activities linked with ideological education activities, public benefit activities, innovation and entrepreneurship activities, recreational activities, social practice activities. The activities list will be published.						

Year 4 Spring Semester（≥5）							
Module	Module Category	Module Code	Module Name	Category	Credit	Hour	Note
Technical discipline modules	Final project Design/Thesis for Graduation	QXU6030	Materials Project	Compulsory	5/10	80/160	Year-long module
Total credits	≥80/5						
Personality Development Modules (elective)	Students are encouraged to choose the modules based on their own development and interests from comprehensive modules, extension modules. Complete 6 credits before graduation. Students are suggested to choose the modules taught in English from NPU and QMES elective module list published in the semester.						
Extension practices	To encourage students to participate in all kinds of activities linked with ideological education activities, public benefit activities, innovation and entrepreneurship activities, recreational activities, social practice activities. The activities list will be published.						
Total hours/total credits: 2974+X/172+X (minimum 3070/178)							
Reference: Code QX modules are taught by QMUL. Code NX modules are taught by NPU. Code U modules are Chinese Compulsory modules, Mental Health, Military Theory modules from MoE, as well as some elective modules.							

2.2 Polymer Materials Science and Engineering Education Plan for 2025 Undergraduates （QMUL Engineering School）

2.2.1 Programme outline

Polymer materials are at the cutting-edge inter-discipline of materials science and soft materials. It builds the development foundation of many scientific research and industries, such as new energy, sustainable development, bio-science, health and medicine, information technology, and intelligent manufacturing. As a popular programme for undergraduates, Polymer Materials Science and Engineering in Queen Mary University of London (hereinafter as QMUL) covers metals, ceramics, polymers, and composite with the involvement of chemistry, materials and engineering. It is one of the most influential and distinct programmes in QMUL, covering polymers, composites, metals and ceramics. We provide elite education and professional training for students with a thorough grounding in the structure of materials, the properties of materials, the performance of materials, the manufacturing processes and design, shaping and applications. It has been rated as 5-star programme by the British government for many times. A survey conducted by the National Union of Students in 2011 showed that it ranked top 1 in the UK. In the first three rounds of discipline evaluation conducted by the Ministry of Education of China, the Materials discipline at Northwestern Polytechnical University (NPU) was ranked 9th, 6th, and 3rd respectively. In the fourth round, it received an 'A' rating, and in the fifth round, it achieved a significant breakthrough, positioning itself at the forefront of the top tier. It was selected twice, in 2017 and 2022, for inclusion in the national "Double First Class" initiative for discipline development, with its ESI discipline ranking entering the top 0.28%. NPU has 6 national-level platforms for scientific research and talent training.

QMES international faculty team comprises 102 teachers in total, with the 18 teachers from QMUL and 84 from NPU. Among the 18 teachers from QMUL, there is 1 professor, 3 associate professors, 6 senior lecturers, and 8 lecturers. Within the 84 teachers from NPU, there are 37 professors, 2 senior engineer, 44 associate professors/associate researchers, and 1 lecturers. Among them, there are 9 national-level talents and 6 provincial/ministerial-level talents. Out of all teachers, 79 have experience of studying or working abroad. The teaching staff are involved in 35 various educational reform projects, with 5 receiving the Baosteel Outstanding Teacher Award and 7 others receiving awards for educational excellence from Queen Mary University of London, including

special awards from the principal. There are 4 national-level leading talents, 5 national-level young talents, 3 elected as fellows of the UK Institute of Materials, Minerals and Mining, and 1 elected as a fellow of the Higher Education Academy in the UK.

In order to learn from the advanced concept and model of training innovative undergraduate talents in British higher education and provide Chinese students with an authentic British-style higher education in their homeland, NPU and QMUL have launched a joint educational institution named Queen Mary University of London Engineering School, Northwestern Polytechnical University (hereinafter referred to as QMES), which was approved by the Ministry of Education of China. QMES, builds on the acknowledged expertise and experience of the two universities and their complementary research strengths in materials science, engineering, chemical and fully uses educational resource advantages and high-level international cooperation platforms of both universities to provide a high quality degree level education in the programme of Polymer Materials Science and Engineering (080407H). We draw on the academic expertise of both institutions and adopt an international teaching mode with curriculum system, teaching materials, and assessment methods from the UK. We aim to cultivate interdisciplinary leading talents who possess an international perspective and recognition of international rules in the field of engineering. With advanced materials and their preparation technology as the core, our programme integrates with the international frontiers of materials science and chemical engineering disciplines. We aim to nurture individuals with patriotism and social responsibility, as well as solid foundations in natural sciences, polymer materials and engineering, and humanities. Our graduates have strong professional competitiveness, high comprehensive competence, innovative consciousness and capabilities, and lifelong learning abilities.

2.2.2 Aims of the programme

Focused on the international academic forefront of materials science, committed to the progress of human civilization and the development of the materials science discipline, this programme aims to cultivate interdisciplinary leading talents with a strong sense of national pride and social responsibility, possessing a solid foundation in natural science, polymer materials and engineering, and humanities, and possessing the abilities of innovation and lifelong learning. We aim to develop interdisciplinary leading talents who can engage in design and development, manufacturing, engineering management, and scientific research in fields such as mechanical

manufacturing, electronic information, telecommunications, computing, and biopharmaceuticals related to materials and chemical engineering. Students who have completed their studies will be able to pursue higher degrees and research within universities in China and internationally or careers in world famous enterprises and international organization.

(1) Humanistic Literacy

Graduates can accurately understand China's characteristics and compare them internationally, developing a comprehensive and objective understanding of modern China while engaging globally. They are familiar with international norms and have a broad global perspective. Graduates should possess good literacy in humanities, professional ethics, social responsibility, and environmental awareness, as well as a concept of sustainable development. They should be capable of handling their positions competently and actively serving their industries and society, becoming qualified constructors of socialist undertakings and reliable successors.

(2) Professional Competence

Graduates should possess the ability to proficiently apply specialized knowledge in their disciplines and utilize modern tools. They should demonstrate innovative spirit, with the capability to conduct scientific research, design, and development of new materials, technologies, and processes. Additionally, they should have engineering skills for equipment transformation and upgrading. They should be able to comprehensively analyze and research complex engineering problems in the field of advanced materials science and engineering, and propose solutions.

(3) Career Orientation

Graduates should be familiar with the current status and trends of industry development, and capable of participating in or independently engaging in material research, process design, technological development, market expansion, development planning, production, and business management in the field of advanced materials science and engineering. Graduates have the capability to pursue further studies at world-renowned universities or to work for globally renowned companies and international organizations.

(4) Social Skills

Graduates should have a high level of English proficiency, capable of proficiently reading professional English materials, engaging in professional writing, and technical communication in English. Graduates should have excellent communication skills, interpersonal skills, and teamwork

abilities. They are able to effectively collaborate in cross-cultural and interdisciplinary teams, playing a pivotal role as technical backbone or primary leaders.

(5) Self-development

Graduates should have innovative thinking, awareness, and capabilities, equipped with the ability to identify, analyse, and solve problems. They possess strong lifelong learning abilities, capable of continuously learning, adapting, and creating new ideas, methods, and products in ever-changing environments. In both learning and practice, they are brave in exploration and daring in innovation, driving technological innovation and social development.

2.2.3 Ideological education

Implement the fundamental task of establishing virtues and educating people, use the thought of socialism with Chinese characteristics in the new era to shape the soul and educate people, and strive to cultivate students to become chief engineers who embody patriotism, humility, pragmatism, inclusiveness, steady accumulation, and vigorous development, all while serving the nation. By making full use of the wide application and strong practical characteristics of polymer materials science and engineering, bridge the module knowledge to national major projects and personage deed through in-class and extracurricular diversified teaching methods, as well as new media carriers to strengthen the guidance of value and foster the ideological and political education through the whole process of teaching. It is necessary to not only make the teaching vivid, but also to make the process of ideological and political moral education concrete so as to convince people with reasonable facts. Guide teachers to align with human development and social progress, national strategies, and technological frontiers, delve into the education elements within the curriculum, and achieve a deep integration of education with professional teaching. Guide students to establish patriotism while teaching them solid professional knowledge in order to improve students' ideological and moral sentiments, enhance their sense of social responsibility and mission to serve the country and the people, as well as to improve their understanding of the relationship between individuals and society, individuals and nature, and to grasp the concepts and implications of engineering ethics and sustainable development.

2.2.4 Graduation Requirements (Core Abilities of Students)

2.2.4.1 Engineering Knowledge：students will master mathematics, natural science, engineering fundamentals, and professional knowledge required for Polymer Materials and

Engineering. Students will have the ability to apply that knowledge to solve complex engineering problems in the design, synthesis, processing, and application of polymer materials.

(1) Students will have the ability to use the terminology of mathematics, natural science, and engineering science to express complex engineering problems in the field of polymer materials and engineering.

(2) Students will have the ability to establish and solve mathematical models for specific processes related to the preparation, processing, and application in the field of polymer materials and engineering.

(3) Students will have the ability to apply mathematics, natural science, engineering fundamentals, and professional knowledge to derive and analyse complex engineering problems in the field of polymer materials and engineering.

(4) Students will have the ability to compare and synthesize engineering fundamentals and professional knowledge with mathematical modeling methods for solutions to complex engineering problems in the field of polymer materials and engineering.

2.2.4.2 Problem Analysis: students will have the ability to use the basic principles of mathematics, natural sciences and engineering sciences to identify and express complex engineering problems of material composition, structure, production processes and related equipment of polymer materials and their products, obtaining effective conclusions through literature research and analysis.

(1) Students will have the ability in utilizing relevant scientific principles to identify and judge key issues in the synthesis, modification, moulding and processing, performance testing and engineering applications of polymer materials.

(2) Students will have the ability in refining and modelling complex engineering problems in the synthesis, modification, moulding and processing, performance testing and engineering applications of polymer materials, clarifying key stages and parameters.

(3) Students will have the ability in refining, analyzing and evaluate complex engineering problems in the field of polymer materials, rationalizing, optimizing and improving solutions.

(4) Students will have the ability to search and analyze literature, and apply effective information to solve complex engineering problems in the preparation, processing and application of polymer materials.

2.2.4.3 Design/Development of Solutions: students will have the ability to propose solutions to complex engineering problems in the production and processing of polymer materials and the regulation of their properties, developing designs for processes and advanced polymer products to meet specific needs, demonstrating innovation in the design process and considering social, health, safety, legal, cultural and environmental factors.

(1) Students will master relevant design/development principles, methods and techniques in the field of polymer materials, and understand factors affecting design objectives and technical solutions.

(2) Students will have the ability to design and develop solutions to complex problems in the field of polymer materials and select appropriate processing and equipment for specific needs.

(3) Students will have the ability to systematically integrate relevant processes in the preparation, processing and application of polymer materials, demonstrating a sense of innovation in solutions to complex engineering problems, and figuring out solutions under various constraints.

(4) Students will have the ability of taking safety, health, legal, cultural and environmental constraints into consideration during the design, development and solving of complex engineering problems in polymer materials.

2.2.4.4 Research: students will have the ability to conduct research based on scientific principles and using scientific methods on complex engineering problems in the process of research and development, production and processing of polymer materials, with abilities in experimental design, implementation, product testing, data analysis, and synthesizing relevant information to reach reasonable and effective conclusions.

(1) Students will have the ability to research and analyze complex engineering problems in the R&D and production of polymer materials using scientific methods based on fundamental principles and professional knowledge in natural sciences and materials fields, combined with literature review.

(2) Students will have knowledge in basic synthesis, characterization, moulding processing and performance testing methods and experimental operation skills, with the ability in choosing research methods and designing experimental programmes.

(3) Students will have the ability to build an experimental set-up or experimental platform, carrying out experiments safely, and collecting experimental data correctly according to the research

programme and methods.

(4) Students will have the ability to analyze and interpret experimental results and synthesize information to reach reasonable and valid conclusions, and engage in interdisciplinary and cutting-edge research exploration.

2.2.4.5 Use of Modern Tools: Students will have the ability to develop, select and use appropriate technologies, resources, modern information technology tools and engineering tools for complex engineering problems in the design, synthesis, moulding and processing of polymer materials, predicting and simulating relevant complex engineering problems and understanding their limitations.

(1) Students will understand the working principles and methods of modern instruments, engineering tools, IT tools and simulation software commonly used in polymer materials and engineering field, understanding their application areas.

(2) Students will have the ability to select and use appropriate techniques, methods and modern tools to analyse, calculate and design the structure and properties of polymer materials, solving complex engineering problems in the preparation, processing and application of polymer materials.

(3) Students will have the ability to develop or select modern tools for the simulation and prediction of complex engineering problems in the preparation, processing and moulding, as well as in the structure and properties of polymer materials and their products, controlling parameters and regulating performance, understanding their limitations.

2.2.4.6 Engineering and Society: students will understand the laws and regulations related to the preparation, production and moulding processing of polymer materials, will have the ability in analyzing engineering practice scenarios based on a background knowledge of engineering related to polymer materials, evaluating the social, health, safety, legal, and cultural impacts of polymer materials engineering practice and solutions to complex engineering problems, and understanding the responsibilities involved.

(1) Students will have basic knowledge of technical standards, intellectual property rights, environmental safety, laws and regulations in the preparation, production and moulding process of polymer materials, and have the initial ability to deal with crises and emergencies.

(2) Students will have experiences in engineering and social practices related to polymer materials, and the ability in analyzing and evaluating the social, health, safety, legal and cultural

impacts of polymer materials and engineering practices and solutions to complex engineering problems, as well as understanding the responsibilities to be assumed.

2.2.4.7 Environment and sustainable development: Have a strong awareness of environmental protection and sustainable development based on the characteristics of polymer materials, and be able to understand and evaluate the influences of engineering practices on complex material engineering problems to the environment and sustainable development of society.

(1) Know and understand the concept and connotation of environmental protection and sustainable development, understand policies and legal regulations related to environmental protection at the national and various levels; be capable of understanding and evaluating the impact of engineering practices on complex material engineering problems on the environment.

(2) Have strong sense of sustainable development, being aware of the national strategy of sustainable development. Correctly understand and evaluate the impact of engineering practices on complex engineering problems in the field of polymer materials on the sustainable development of society.

2.2.4.8 Professional ethics: Possess a sense of patriotism, humanities and social science literacy, and social responsibility. Capable of understanding and adhering to engineering professional ethics and standards in polymer materials and engineering practices, and also fulfilling responsibilities.

(1) Have a correct world view, outlook on life and values, possessing a sense of patriotism, humanistic knowledge, scientific literacy, and social responsibility.

(2) Understand the engineering professional ethics and norms of honesty, fairness andintegrity, and consciously abide them in engineering practices. Understand the responsibility of polymer materials and engineering professional engineers to the public's safety, health and welfare, and the ecological environment, and consciously fulfill duties in engineering practice.

2.2.4.9 Individual and team: Possess team collaboration abilities, understand the significance and role of teams in a multidisciplinary context ,and the positioning and responsibilities of each role in the team, capable of taking on the roles of an individual, team member, and leader within a team.

(1) Possess team spirit, understand the significance and role of team collaboration under multidisciplinary integration. Capable of effectively communicating with members of other disciplines within the team. Capable of working independently or in cooperation within the team.

(2) Understand the positioning and responsibilities of each role in the polymer materials

research and development team, and production team.Actively take on the roles of an individual, team member, and leader within the team, collaborate with team members to complete tasks, possessing the ability to organise and manage a team.

2.2.4.10 Communication: Capable of effectively communicating and exchanging views on issues related to polymer materials and engineering with peers both domestically and internationally and with the general public, including writing reports, making statements, clearly expressing or responding to instructions, and possessing a certain international outlook and cross-cultural background learning, communication, and exchange abilities.

(1) Capable of accurately describing and clearly expressing complex engineering problems related to polymer materials engineering through drawings, reports, design manuscripts, speeches, and defences in both written and oral forms, understanding the differences in communication and exchange on complex engineering problems with industry peers and the general public.

(2) Possess strong language expression abilities and foreign language listening, speaking, reading, and writing abilities, capable of basic communication, exchange, and cooperation on the research, development, design, and application of polymer materials in a cross-cultural context, understanding domestic and international development trends, research hotspots in the field, understanding and respecting the differences and diversity of cultures around the world.

2.2.4.11 Project management: Understand and master the principles of engineering management and economic decision-making methods, have engineering practice experience, and apply them in solving complex synthesis, processing, and engineering application problems of polymer materials in a multidisciplinary environment.

(1) Have engineering practice learning experiences, understand and master important engineering management principles and economic decision-making methods involved in polymer materials engineering activities.

(2) Capable of applying related engineering management principles and economic decision-making methods in engineering activities in a multidisciplinary environment, using engineering management and economic decision-making methods in the process of designing and developing solutions in the field of polymer materials and engineering.

2.2.4.12 Lifelong learning: Possess the awareness of self-learning and lifelong learning, with the ability to continuously learn and adapt to development.

(1) Have good mental and physical health, Capable of recognising the necessity and importance of continuous learning, possessing the awareness of self-learning and lifelong learning.

(2) Capable of continuously learning and adapting to the needs of personal and industry development, including the ability to understand complex engineering problems, analyse, summarise, and pose questions in the field of polymer materials and engineering.

2.2.5 Qualification and Degree Certificate

Official length of the programme: 4+0 years study in accordance with the credit management system, the maximum length of study shall not exceed 6 years.

Qualification and certificate: After students have successfully passed all modules and meet the graduation requirements of two universities, they will be awarded diploma by NPU, BEng degree by NPU, and BEng degree by QMUL.

2.2.6 Credits and Hours

Total credits：172+X credits

Includes：

Type of module	Credits
General education modules	84
Technical discipline modules	88
Total credits	172
Personality Development Modules Extension practices	X

2.2.7 Curriculum Structure and Credits

The total credits for the Polymer Materials and Engineering major (080407H) are 172, with a total study time of 2974 hours. The distribution of credits for the modules is as follows:

Number of modules from QMUL introduced	21	Total number of modules	53	Percentage	39.6%
Number of core modules from QMUL introduced	18	Total number of core modules	25	Percentage	72%

Number of core modules taught by QMUL lecturers	18	Total number of modules	53	Percentage	34%
Hours for core modules taught by QMUL lecturers	1016	Total hours for modules	2974	Percentage	34.2%

(General education modules and technical discipline modules: 172 credits； Personality Development Modules and extension practices : 6 credits)

2.2.7.1 General education modules 84 credits

1). General Studies modules

(1) Aesthetics and Art modules 4 credits

Module Code	Module Name	Credit	Hour	Category	Note
U30G11001	College aesthetic education	2	32	Compulsory module	
U30G11002	Art appreciation	2	32	Elective compulsory	Art history modules
U30G12001	The Path of Chinese Aesthetics(Eng)	2	32		
U30G11020	Appreciation Course of Classical Poetry and Music	2	32		Music modules
U30G11007	Appreciation of Drama	2	32		Drama modules
U30G11008	Appreciation of Chinese Opera	2	32		
U30G11022	Beijing opera	2	32		
U30G11016	The beauty of Chinese literature and art	2	32		Literature modules
U30G11005	Film and Television Appreciation	2	32		Film and television modules
U30G11018	Video China-Documentary and Cross-cultural Communication	2	32		
U30G11021	Mural Art Workshop	2	32		Art modules
see the current semester modules					Dance modules
see the current semester modules					Art design modules

All students should take the compulsory module—college aesthetic education (2 credits) and at least 2 credits in the other eight elective compulsory modules designated by the Ministry of Education.

Civilization and Technology, Innovation and Entrepreneurship, Management and Leadership, Global Perspectives, Ecology and Sustainable Development, Writing and Communication," each

module worth 6 credits. Please refer to the module offerings for the current semester for specific details.

Module Code	Module Name	Credit	Hour	Category
	Civilization and Technology	6	96	Elective
	Innovation and Entrepreneurship			
	Management and Leadership			
	Global Vision			
	Ecology and Sustainable Development			
	Writing and Communication			

Note: Students can choose modules from one or more categories listed above and should take at less 6 credits. The module list in each semester will be published by the University.

2). Public Basic Modules

(1) Ideological and political theory modules 18 credits

Module Code	Module Name	Credit	Hour	Category
U13G11007	Marxism General Principle	2.5	40	Compulsory
U44G11004	Fundamental of Mao Ze Dong Thoughts	2.5	40	Compulsory
U44G11001	Essentials of Chinese Modern History	2.5	40	Compulsory
U13G11012	Ethics and Fundamental of Law	2.5	40	Compulsory
U44G21001	Ideological and Political Practice	2	32	Compulsory
U44G11013	Situation and Policy（1）	0.5	8	Compulsory
U44G11014	Situation and Policy（2）	0.5	8	Compulsory
U44G11015	Situation and Policy（3）	0.5	8	Compulsory
U44G11016	Situation and Policy（4）	0.5	8	Compulsory
U44G11009	Outline of Xi Jinping Thought on Socialism with Chinese	3	48	Compulsory
U44G11003	History of the Communist Party of China	1	16	Elective compulsory
U44G11012	History of the People's Republic of China	1	16	
U44G11005	History of Reform and Opening Up	1	16	
U44G11011	History of the Development of Socialism	1	16	

Students much take all compulsory modules listed in the above, in total 18 credits. Situation and Policy (1)(2)(3)(4) four modules must be taken in 4 academic years (Semester 1 to Semester 7)

respectively with 8 hours (0.5 credit) in each year, in total 32 hours (2 credits). Students must choose to study at least one module from the modules "History of the Communist Party of China", "History of the People's Republic of China", "History of Reform and Opening Up" and "History of the Development of Socialism", and take at least 1 credit.

Military modules 4 credits

Module Code	Module Name	Credit	Hour	Category
U34G11005	Military Theory	2	36	Compulsory
U34P41002	Military Training	2	120	Compulsory

(3) Sports and Mental health modules 6 credits

Module Code	Module Name	Credit	Hour	Category
U34G11004	Students Mental Health Education	2	32	Compulsory
	For specific programme modules, see the current semester modules offered by the Physical Education Department	4	144	Elective compulsory

Physical Education is compulsory module in the first to the fourth semester, taking 1 credit every semester. Students can freely choose different modules according to their majors, physical conditions, interests and physical basis. Students must meet the 421X standard of school physical education qualification upon graduation, that is, complete 4 credits; students should be proficient in 2 sports skills and obtain a skill certificate (one of which is swimming); during the undergraduate period, students can study physical quality development module according to their personal interests and obtain X credits. Students are suggested to choose sports modules during first 4 semesters.

(4) National Security Education 1 credit

National security education is a compulsory public fundamental module with the requirements of attending no less than 1 credit (2 hours) in one academic year. The module list in each semester will be published by the University.

(5) Language modules 8 credits

Module Code	Module Name	Credit	Hour	Category
UQMG12211/QXU3103	English for Science and Engineering	4	64	Compulsory
QXU3104	Communication in Science and Engineering	4	64	Compulsory

(6) Mathematics and Natural Science 37 credits

Module Code	Module Name	Credit	Hour	Category
NXC3000	Advanced Math 1	5.5	88	Compulsory
NXC3004	Advanced Math 2	5.5	88	Compulsory
NXC3002	Linear Algebra	3	48	Compulsory
NXC3005	Mathematical Modelling and Computing	4	64	Compulsory
NXC3001	General Physics	5	82	Compulsory
QXU4004	Engineering Chemistry	3.5	56	Compulsory
NXC4012	Mechanical Modelling	3.5	56	Compulsory
NXC4122	Thermodynamics and Fluid Mechanics	3.5	56	Compulsory
QXU5010	Surfaces and Interfaces	3.5	56	Compulsory

2.2.6.2 Technical discipline Modules 88 credits

(1) Interdisciplinary Platform Modules 10.5 credits

Module Code	Module Name	Credit	Hour	Category
QXU3112	Academic and Professional Engineering Skills	3.5	56	Compulsory
UQMM12220/ QXU4112	Developing Professional Engineering Skills	3.5	56	Compulsory
UQMM12230/ QXU5112	Business and Professional Skills in Engineering	3.5	56	Compulsory

(2) Discipline Elementary Modules 14 credits

Module Code	Module Name	Credit	Hour	Category
QXU4016	Engineering Design Methods	3.5	56	Compulsory
QXU4015	Engineering Materials	3.5	56	Compulsory
QXU4000	Materials Science 1-structure and properties	3.5	56	Compulsory
QXU4006	Materials Science 2-processing and applications	3.5	56	Compulsory

(3) Discipline Core Modules 29 credits

Module Code	Module Name	Credit	Hour	Category
QXU4003	Polymer Chemistry	4	64	Compulsory
QXU5032	Physical Properties of Polymers	4	64	Compulsory
NXC5013	Polymer Characterization	3.5	56	Compulsory

NXC5014	Elastomer Materials	3.5	56	Compulsory
NXC5028	Polymer Degradation	3.5	56	Compulsory
QXU5030	Composite Materials	3.5	56	Compulsory
QXU6004	Materials Selection in Engineering Design	3.5	56	Compulsory
QXU6008	Materials and Sustainability	3.5	56	Compulsory

(4) Discipline Elective Module 14.5 credits

Module Code	Module Name	Credit	Hour	Category
NXC6018	Polymer Processing	4	64	Elective compulsory
NXC6026	Failure of Polymers	4	64	Elective compulsory
QXU6028	Polymer Devices	3	48	Elective compulsory
QXU6033	Advanced Polymer Chemistry	3.5	56	Elective compulsory

(5) Comprehensive Practice 10 credits

Students can participate in various forms of scientific research training including innovation and entrepreneurship programme and experiment, academic competition, and scientific research project. Students are also encouraged to participate in various forms of practice such as overseas practice, international internship, winter and summer schools. Education on labour replies on industrial practice (10 hours) and summer school (6 hours).

Module Code	Module Name	Credit	Hour	Category
QXU4007	Experiments in Materials 1	3.5	56	Compulsory
QXU5017	Experiments in Materials 2	3.5	56	Compulsory
NXC0001	Scientific Research	1	16	Compulsory
NXC0002	Production Practice	2	32	Compulsory

(6) Final project/Thesis for Graduation 10 Credits

Module Code	Module Name	Credit	Hour	Category
QXU6040	Polymer Project	10	160	Compulsory

This project/thesis also supports education on labour with 16 hours to guide students to develop their labor habits and correct labor values.

2.2.6.3 Personality Development Modules (6 credits, at least 3 modules)

Students are encouraged to choose the modules taught in English and from the following categories based on their own development and interests.

(1) Comprehensive Literary Module

It is suggested that students should choose the modules taught in English from the following four categories. The module list in each semester will be published by the University.

Scientific literacy modules: subjects on natural science such as introduction to aeronautics, astronautics and navigation, environment, biology, etc.

Module Code	Module Name	Credit	Hour	Category
NXC1011	Engineering Literacy-Basic Engineering Practice	2	32	Elective
NXC1012	Engineering Literacy—Teaching and Innovative Practice of Intelligent Robot System	2	32	Elective
Details of the above-mentioned modules offered each semester can be found in the course selection handbook for the respective semester.				

B. Modules on economics, management and law: including economy, management, legal education, etc.

C. Humanities modules: including philosophy, ethics, history, culture, language, literature, society, aesthetics, life and development, etc.

Module Code	Module Name	Credit	Hour	Category
NXC1008	History of Western Philosophy	2	32	Elective
Details of the above-mentioned modules offered each semester can be found in the course selection handbook for the respective semester.				

D. Art literacy modules:

Module Code	Module Name	Credit	Hour	Category
UQML21009	Wine Culture and Tasting Art	1	16	Elective
Details of the above-mentioned modules offered each semester can be found in the course selection handbook for the respective semester.				

Discipline Extension Module

Module Code	Module Name	Credit	Hour	Category
UQML11006	Biochemistry	2	32	Elective
UQML11005	Analytical Chemistry	2	32	Elective
NXC1005	Inorganic Chemistry	2	32	Elective
NXC1006	Fundamentals of Organic Chemistry	2	32	Elective
NXC1007	Physical Chemistry	2	32	Elective
NXC1013	Introduction to Quantum Mechanics	2	32	Elective
NXC1014	Instrumental Analysis	2	32	Elective
Details of the above-mentioned modules offered each semester can be found in the course selection handbook for the respective semester.				

It includes all modules set up by other Schools and major categories.

(3) Advanced Academic Module

It includes general modules offered by the University and postgraduate modules. Credits beyond the ones required by the education plan of the programme can be included in this category.

Module Code	Module Name	Credit	Hour	Category
NXC1015	Interpersonal and Communication Skills	2	32	Elective
UQML11007	Introduction of Solid State Physics	2.5	40	Elective
UQMM11008	The Structure and Properties of Polymers	2	32	Elective
UQMG11001	Introduction to Fuel Cell	1	16	Elective
UQML11009	Service Characteristics of Materials Under Extreme Conditions	2	32	Elective
UQML21010	Improving Your Study Skills	1	16	Elective
UQMM11001	Advanced Materials Science and Engineering	1.5	24	Elective
UQMM12002	Multiscale Modeling and Simulation of Materials	2	32	Elective

2.2.6.4 Extension Practices

To encourage students to participate in all kinds of activities linked with ideological education activities, public benefit activities, innovation and entrepreneurship activities, recreational activities, labor Practice, social practice activities. The activities list will be published.

2.2.8 The Support matrix of curriculum system, aims of programme and graduation requirements

General Education Modules

Module Category	Module Name	Aims of Programme					Graduation Requirements																																	
		1	2	3	4	5	1				2				3				4				5			6		7		8		9		10		11		12	
							1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	4.1	4.2	4.3	4.4	5.1	5.2	5.3	6.1	5.2	7.1	6.2	8.1	8.2	9.1	9.2	10.1	10.2	11.1	11.2	12.1	12.2
Ideological and political theory modules	Ethics and Fundamental of Law	√																								0.1														
	Introduction to Mao Zedong Thoughts and the Theoretical System of Socialism with Chinese Characteristics	√																								0.1														
	Outline of Xi Jinping Thought on Socialism with Chinese characteristics for a new era	√																								0.1														
	Essentials of Chinese Modern History	√																								0.1														
	Marxism General Principle	√																								0.1														
	Ideological and Political Practice	√																								0.1														
	Situation and Polic1-4	√																								0.1														

Module Category	Module Name	Aims of Programme					Graduation Requirements																															
		1	2	3	4	5	1				2				3				4				5			6		7		8		9		10		11		12	
							1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	4.1	4.2	4.3	4.4	5.1	5.2	5.3	6.1	5.2	7.1	6.2	8.1	8.2	9.1	9.2	10.1	10.2	11.1	11.2	12.1	12.2
	History of the Communist Party of China	√																								0.1													
	History of Reform and Opening Up	√																								0.1													
	History of the Development of Socialism	√																								0.1													
	History of the People's Republic of China	√																								0.1													
Military Module	Military Theory	√																												0.3									
	Military Training	√																												0.3									
Sports and Mental Health Module	Students Mental Health Education	√																																			0.1		
	physical education	√																																			0.1		
Aesthetics and Art Module	College aesthetics Education	√				√																																0.1
	Limited art Elective	√				√																																0.1
Language Module	English for Science and Engineering				√																								0.1		0.1		0.2	0.3			0.2	

Module Category	Module Name	Aims of Programme					Graduation Requirements																																			
		1	2	3	4	5	1				2				3				4				5			6		7		8		9		10		11		12	
							1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	4.1	4.2	4.3	4.4	5.1	5.2	5.3	6.1	5.2	7.1	6.2	8.1	8.2	9.1	9.2	10.1	10.2	11.1	11.2	12.1	12.2
	Communication in Science and Engineering				√									0.2																			0.2	0.3			0.2	
Mathematics and Natural	Advanced Math 1		√				0.2																																	
	Advanced Math 2		√				0.2																																	
	Linear Algebra		√					0.3																																	
	Mathematical Modelling and Computing		√				0.2	0.3																																	
	General Physics		√				0.2													0.2																				
	Engineering Chemistry		√	√	√		0.2				0.1										0.3					0.1						0.1		0.1						
	Mechanical		√	√				0.2							0.2				0.2																					
	Modelling		√	√					0.2			0.25												0.4																
	Thermodynamics and Fluid Mechanics																																							
	Surfaces and Interfaces		√	√							0.2					0.2							0.2	0.3																

Module Category	Module Name	Aims of Programme					Graduation Requirements																																			
		1	2	3	4	5	1				2				3				4				5			6		7		8		9		10		11		12	
							1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	4.1	4.2	4.3	4.4	5.1	5.2	5.3	6.1	5.2	7.1	6.2	8.1	8.2	9.1	9.2	10.1	10.2	11.1	11.2	12.1	12.2
National Security Education	See modules offered in the current semester				√																					0.1													
Civilization and Technology					√																									0.4									
Innovation and Entrepreneurship					√																																		0.3
Management and Leadership				√																															0.25				
Global Vision						√																																		0.2
Ecology and Sustainable Development			√		√																							0.2											
Writing and Communication				√																													0.1						

Technical discipline Modules

Module Category	Module Name	Aims of Programme					Graduation Requirements																														
		1	2	3	4	5	1				2				3				4				5			6		7		8		9		10		11		12	
							1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	4.1	4.2	4.3	4.4	5.1	5.2	5.3	6.1	5.2	7.1	6.2	8.1	8.2	9.1	9.2	10.1	10.2	11.1	11.2	12.1	12.2
Interdisciplinary Platform Modules	Academic and Professional Engineering Skills		√	√																		0.3	0.2									0.15						0.2	
	Developing Professional Engineering Skills		√	√														0.25													0.3		0.3			0.2			
	Business and Professional Engineeing Skills			√	√																						0.3			0.3	0.3					0.3			
Discipline Elementary Modules	Engineering Design Methods		√	√	√										0.2	0.2	0.3	0.25																					
	Materials Science 1-structure and properties		√	√	√				0.1		0.1		0.2																										
	Materials Science 2-processing and applications		√	√	√			0.2			0.2			0.3			0.2																						
	Engineering Materials		√	√							0.1		0.2		0.2																		0.1						
Discipline Core Modules	Polymer Chemistry		√	√	√						0.2					0.2																		0.1					
	Physical Properties of Polymers		√	√	√				0.1				0.2																			0.2							

Module Category	Module Name	Aims of Programme					Graduation Requirements																																	
		1	2	3	4	5	1				2				3				4				5			6		7		8		9		10		11		12	
							1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	4.1	4.2	4.3	4.4	5.1	5.2	5.3	6.1	5.2	7.1	6.2	8.1	8.2	9.1	9.2	10.1	10.2	11.1	11.2	12.1	12.2
	Polymer Characterization		√	√	√							0.25			0.2					0.3				0.3																
	Elastomer Materials		√	√	√					0.3									0.2																0.1				
	Polymer Degradation	√	√	√								0.25							0.3						0.5				0.3								0.4			
	Composite Materials		√	√	√				0.2				0.2			0.2						0.4																		
	Materials Selection in Engineering Design			√	√	√					0.1				0.2	0.2																0.1							
	Materials and Sustainability	√		√	√													0.25									0.4	0.4				0.3							
Discipline Elective Modules	Polymer Processing		√	√	√					0.2				0.3			0.2				0.3																0.2			
	Failure of Polymers	√		√	√					0.3										0.2					0.5		0.3										0.4			
	Polymer Devices		√	√									0.2				0.3											0.2												
	Advanced Polymer Chemistry	√	√	√										0.2																		0.15		0.2						
Comprehensive Practice	Scientific Research Training			√	√	√																						0.2												
	Production Practice		√	√	√	√																	0.3				0.4		0.3											

Module Category	Module Name	Aims of Programme					Graduation Requirements																																	
		1	2	3	4	5	1				2				3				4				5			6		7		8		9		10		11		12	
							1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	4.1	4.2	4.3	4.4	5.1	5.2	5.3	6.1	5.2	7.1	6.2	8.1	8.2	9.1	9.2	10.1	10.2	11.1	11.2	12.1	12.2
	Experiments in Materials 1			√	√				0.2										0.3													0.2		0.1				0.2	
	Experiments in Materials 2			√	√				0.2											0.3		0.3										0.3			0.25			0.3
Design/ Thesis for Graduation	Graduation Design of Polymer Major		√	√	√					0.2		0.25						0.25			0.4		0.3											0.3					

2.2.9 Instructive Teaching Plan

The Instructive Teaching Plan of Polymer Materials Science and Engineering for Undergraduates of Grade 2025

Year 1 Autumn Semester (credits≥30)							
Module	Module Category	Module Code	Module Name	Category	Credit	Hour	Note
General Education	Ideological and political theory modules	U13G11012	Ethics and Fundamental of Law	Compulsory	2.5	40	
		U44G11013	Situation and Policy（1）	Compulsory	0.5	8	
	Military modules	U34G11005	Military Theory	Compulsory	2	32	
		U34P41002	Military Training	Compulsory	2	120	
	Sports and Mental health modules	See the list published in the current semester	Physical Education	Elective compulsory	1	32	It includes in-class 36 hours and off-class 4 hours. In-class 36 hours includes 32 specific PE classes and 4 theory hours. Off-class 4 hours includes physique test. It includes 16 hours of physical fitness class, 1 hour once a week, from Monday to Friday afternoon 16:00-16:45,16:55-17:40,19:00-19:45, 19:55-20:40 any time period; 5. Long run (3.2

Year 1 Autumn Semester (credits≥30)							
Module	Module Category	Module Code	Module Name	Category	Credit	Hour	Note
							km (male)/2.4 km(female) , 5 times a week, 32 times per semester.
	Language modules	UQMG12211/QXU3103	English for Science and Engineering	Compulsory	4	64	
	Mathematics and Natural Science	NXC3000	Advanced Mathematics 1	Compulsory	5.5	88	
		NXC3001	General Physics	Compulsory	5	82	
		NXC3002	Linear Algebra	Compulsory	3	48	
	Security education	See the list published in the current semester	National security education	Compulsory	1	16	National security education is a compulsory public fundamental module with the requirements of attending no less than 1 credit (2 hours) in one academic year.
	Civilization and Technology	See the list published in the current semester		Elective compulsory	2	32	Before the autumn semester of the fourth academic year, students must have completed at least 6 credits. Specific courses can be found in the course offering list of the current semester.
	Innovation and Entrepreneurship						
	Management and Leadership						
	Global Vision						
	Ecology and Sustainable Development						
	Writing and Communication						

Year 1 Autumn Semester (credits≥30)							
Module	Module Category	Module Code	Module Name	Category	Credit	Hour	Note
Technical discipline modules	Interdisciplinary Platform Modules	QXU3112	Academic and Professional Engineering Skills	Compulsory	1.5 /3.5	24 /56	Year-long module
Total hours/ credits	≥586/30						
Personality Development Modules (elective)	Students are encouraged to choose the modules based on their own development and interests from comprehensive modules, extension modules. Complete 6 credits before graduation. Students are suggested to choose the modules taught in English from NPU and QMES elective module list published in the semester.						
Extension practices	To encourage students to participate in all kinds of activities linked with ideological education activities, public benefit activities, innovation and entrepreneurship activities, recreational activities, labor practice activities, social practice activities. The activities list will be published.						

Year 1 Spring Semester（≥30.5）							
Module	Module Category	Module Code	Module Name	Category	Credits	Hour	Note
General Education	Ideological and political theory modules	U44G11001	Essentials of Chinese Modern History	Compulsory	2.5	40	Open in autumn and spring semesters. Suggest to complete in Year 1 Spring Semester.
	Sports and Mental health modules	U34G11004	Students Mental Health Education	Compulsory	2	32	
		See the list published in the current semester	Physical Education	Elective compulsory	1	32	It includes in-class 36 hours and off-class 4 hours.

							In-class 36 hours includes 32 specific PE classes and 4 theory hours. Off-class 4 hours includes physique test. Long run (3.2 km (male)/2.4 km(female)5 times a week, 32 times per semester.
	Aesthetics and Art modules	See the list published in the current semester	Eight elective modules designated by the Ministry of Education.	Elective compulsory	2	32	They are limited elective modules including “College aesthetic education" and art literacy modules, for a total of 4 credits; among them, "College aesthetic education" is a compulsory module (2 credits); all students should take at least 2 credits in the eight art limited elective modules designated by the Ministry of Education.
	Language modules	QXU3104/ UQMG12212	Communication in Science and Engineering	Compulsory	4	64	

	Mathematics and Natural Science	NXC3004	Advanced Mathematics 2	Compulsory	5.5	88	
		NXC3005	Mathematical Modelling and Computing	Compulsory	4	64	
		QXU4004	Engineering Chemistry	Compulsory	3.5	56	
	Civilization and Technology	See the list published in the current semester		Elective compulsory	1	16	Suggest to take 1 credit from these categories in this semester and gain 6 credits before graduate.
	Innovation and Entrepreneurship						
	Management and Leadership						
	Global Vision						
	Ecology and Sustainable Development						
	Writing and Communication						
Technical discipline modules	Interdisciplinary Platform Modules	QXU3112	Academic and Professional Engineering Skills	Compulsory	2 /3.5	32 /56	Year-long module
	Discipline Elementary Modules	QXU4015	Engineering Materials	Compulsory	3.5	56	
Total hours/ credits	≥512/30.5						
Personality Development Modules(elective)	Students are encouraged to choose the modules based on their own development and interests from comprehensive modules, extension modules. Complete 6 credits before graduation. Students are suggested to choose the modules taught in English from NPU and QMES elective module list published in the semester.						
Extension practices	To encourage students to participate in all kinds of activities linked with ideological education activities, public benefit activities, innovation and entrepreneurship activities, recreational activities, labor practice activities, social practice activities. The activities list will be published.						

Year 2 Autumn Semester（credits≥24.5）							
Module	Module Category	Module Code	Module Name	Category	Credits	Hour	Note
General Education	Ideological and political theory	U44G11009	Outline of Xi Jinping Thought on Socialism with Chinese Characteristics for a New era	Compulsory	3	48	
		U44G11014	Situation and Policy（2）	Compulsory	0.5	8	Open in autumn and spring semesters. Suggest to complete in Year 2 Autumn Semester.
		U44G11003	History of the Communist Party of China	Elective compulsory	1	16	Open in autumn and spring semesters. At least choose one. Complete at least 1 credit.
		U44G11012	History of the People's Republic of China				
		U44G11005	History of Reform and Opening Up				
		U44G11011	History of the Development of Socialism				
	Sports and Mental health modules	See the list published in the current semester	Physical Education	Elective compulsory	1	32	It includes in-class 36 hours and off-class 4 hours. In-class 36 hours includes 32 specific PE classes and 4 theory

Year 2 Autumn Semester（credits≥24.5）							
Module	Module Category	Module Code	Module Name	Category	Credits	Hour	Note
							hours. Off-class 4 hours includes physique test. Long run 3.2 km (male)/2.4 km(female)5 timies a week, 32 times per semester.
	Civilization and Technology	See the list published in the current semester		Elective compulsory	1	16	Suggest to take 1 credit from these categories in this semester and gain 6 credits before graduate.
	Innovation and Entrepreneurship						
	Management and Leadership						
	Global Vision						
	Ecology and Sustainable Development						
	Writing and Communication						
Technical discipline modules	Interdisciplinary Platform Modules	UQMM12220/QXU4112	Developing Professional Engineering Skills	Compulsory	1.5/3.5	24/56	Year-long module
	Discipline elementary modules(including lab session technical project)	QXU4016	Engineering Design Methods	Compulsory	3.5	56	
		QXU4000	Materials Science 1 Structure and Properties	Compulsory	3.5	56	
	Discipline Core	QXU4003	Polymer	Compulsory	4	64	

Year 2 Autumn Semester（credits≥24.5）							
Module	Module Category	Module Code	Module Name	Category	Credits	Hour	Note
	Modules		Chemistry				
	Comprehensive Practice	QXU4007	Experiments in Materials 1	Compulsory	3.5	56	
Total hours/ credits	≥376/24.5						
Personality Development Modules (elective)	Students are encouraged to choose the modules based on their own development and interests from comprehensive modules, extension modules. Complete 6 credits before graduation. Students are suggested to choose the modules taught in English from NPU and QMES elective module list published in the semester.						
Extension practices	To encourage students to participate in all kinds of activities linked with ideological education activities, public benefit activities, innovation and entrepreneurship activities, recreational activities, labor practice activities, social practice activities. The activities list will be published.						

Year 2 Spring Semester（credits≥23.5）							
Module	Module Category	Module Code	Module Name	Category	Credits	Hour	Note
General Education	Ideological and political theory	U44G11004	Outline of Mao Zedong's thought of Chinese modern and contemporary history and the theoretical system	Compulsory	2.5	40	
		U44G21001	Ideological and Political Practice	Compulsory	2	32	
		U44G11003	History of the Communist Party of China	Elective compulsory	1	16	Open in autumn and spring semesters. At least choose one. Complete at least 1 credit.
		U44G11012	History of the People's Republic of China				
		U44G11005	History of reform and opening up				

Year 2 Spring Semester（credits≥23.5）							
Module	Module Category	Module Code	Module Name	Category	Credits	Hour	Note
		U44G11011	History of the development of socialism				
	Sports and Mental health modules	See the list published in the current semester	Physical Education	Elective compulsory	1	32	It includes in-class 36 hours and off-class 4 hours. In-class 36 hours includes 32 specific PE classes and 4 theory hours. Off-class 4 hours includes physique test. Long run 3.2 km (male)/2.4 km(female)5 timies a week, 32 times per semester.
	Mathematics and Natural Science	NXC4012	Mechanical Modelling	Compulsory	3.5	56	
		NXC4122	Thermodynamics and Fluid Dynamics	Compulsory	3.5	56	
	Civilization and Technology	See the list published in the current semester		Elective compulsory	1	16	Suggest to take 1 credit from these categories in this semester and gain 6 credits before graduate.
	Innovation and Entrepreneurship						
	Management and Leadership						
	Global Vision						
	Ecology and Sustainable						

Year 2 Spring Semester（credits≥23.5）							
Module	Module Category	Module Code	Module Name	Category	Credits	Hour	Note
	Development						
	Writing and Communication						
Technical discipline modules	Interdisciplinary Platform Modules	UQMM1222 0/QXU4112	Developing Professional Engineering Skills	Compulsory	2/3.5	32/56	Year-long module
	Discipline elementary modules	QXU4006	Materials Science 2 Processing and Applications	Compulsory	3.5	56	
	Comprehensive Practice	QXU5017	Experiments in Materials 2	Compulsory	3.5	56	
Total hours/ credits	≥392/23.5						
Personality Development Modules (elective)	Students are encouraged to choose the modules based on their own development and interests from comprehensive modules, extension modules. Complete 6 credits before graduation. Students are suggested to choose the modules taught in English from NPU and QMES elective module list published in the semester.						
Extension practices	To encourage students to participate in all kinds of activities linked with ideological education activities, public benefit activities, innovation and entrepreneurship activities, recreational activities, labor practice activities, social practice activities. The activities list will be published.						

Year 3 Autumn Semester（credits≥20.5）							
Module	Module Category	Module Code	Module Name	Category	credits	Hour	Note
General Education	Ideological and political theory modules	U13G11007	Marxism General Principle	Compulsory	2.5	40	
		U44G11003	History of the Communist Party of China	Elective compulsory	1	16	Open in autumn and spring semesters. At least choose one. Complete at least
		U44G11012	History of the People's				

			Republic of China				1 credit.
		U44G11005	History of reform and opening up				
		U44G11011	History of the development of socialism				
	Mathematics and Natural Science	QXU5010	Surfaces and Interfaces	Compulsory	3.5	56	
	Civilization and Technology	See the list published in the current semester		Elective compulsory	1	16	Suggest to take 1 credit from these categories in this semester and gain 6 credits before graduate.
	Innovation and Entrepreneurship						
	Management and Leadership						
	Global Vision						
	Ecology and Sustainable Development						
	Writing and Communication						
Technical discipline modules	Interdisciplinary Platform Modules	UQMM12230/QXU5112	Business and Professional Engineeing Skills	Compulsory	1.5/3.5	24/56	Year-long module
	Discipline Core Modules	NXC5028	Polymer Degradation	Compulsory	3.5	56	
		QXU5032	Physical Properties of Polymers	Compulsory	4	64	
		NXC5013	Polymer Characterisation	Compulsory	3.5	56	
Total hours/ credits	≥328/20.5						

Personality Development Modules (elective)	Students are encouraged to choose the modules based on their own development and interests from comprehensive modules, extension modules. Complete 6 credits before graduation. Students are suggested to choose the modules taught in English from NPU and QMES elective module list published in the semester.
Extension practices	To encourage students to participate in all kinds of activities linked with ideological education activities, public benefit activities, innovation and entrepreneurship activities, recreational activities, labor practice activities, social practice activities. The activities list will be published.

Year 3 Spring Semester（credits≥19.5）							
Module	Module Category	Module Code	Module Name	Category	Credits	Hour	Note
		U44G11015	Situation and Policy（3）	Compulsory	0.5	8	Open in autumn and spring semesters. At least choose one. Suggest to complete this 1 credit in Year 3 Spring Semester.
		U44G11003	History of the Communist Party of China	Elective compulsory	1	16	Open in autumn and spring semesters. At least choose one. Complete at least 1 credit.
		U44G11012	History of the People's Republic of China				
		U44G11005	History of reform and opening up				
		U44G11011	History of the development of socialism				
	Sports and Mental health modules		Physical Education	Elective			1.Obtain X sports quality credits; 2. Extracurricular 4-class-hour

Year 3 Spring Semester（credits≥19.5）							
Module	Module Category	Module Code	Module Name	Category	Credits	Hour	Note
							physical fitness test
Technical discipline modules	Interdisciplinary Platform Modules	UQMM12230/QXU5112	Business and Professional Engineering Skills	Compulsory	2/3.5	32/56	Year-long module
	Discipline Core Module	QXU5030	Composite Materials	Compulsory	3.5	56	
		NXC5014	Elastomer Materials	Compulsory	3.5	56	
		QXU6008	Materials and Sustainability	Compulsory	3.5	56	
	Discipline Elective Module	QXU6033	Advanced Polymer Chemistry	Elective compulsory	3.5	56	
	Comprehensive Practice	NXC0002	Production Practice	Compulsory	2	80	
Total hours/ credits	≥376/19.5						
Personality Development Modules (elective)	Students are encouraged to choose the modules based on their own development and interests from comprehensive modules, extension modules. Complete 6 credits before graduation. Students are suggested to choose the modules taught in English from NPU and QMES elective module list published in the semester.						
Extension practices	To encourage students to participate in all kinds of activities linked with ideological education activities, public benefit activities, innovation and entrepreneurship activities, recreational activities, labor practice activities, social practice activities. The activities list will be published.						

Year 4 Autumn Semester（credits≥21）							
Module	Module Category	Module Code	Module Name	Category	Credits	Hour	Note
General Education	Ideological and political theory	U44G11016	Situation and Policy（4）	Compulsory	0.5	8	Open in autumn and spring semesters.

Year 4 Autumn Semester（credits≥21）							
Module	Module Category	Module Code	Module Name	Category	Credits	Hour	Note
	modules						Suggest to complete in Year 4 Autumn Semester.
	Sports and Mental health modules		Physical Education	Elective			Obtain X sports quality credits;
Technical discipline modules	Discipline Core Modules	QXU6004	Materials Selection in Engineering Design	Compulsory	3.5	56	
	Discipline Elective Modules	QXU6018	Polymer Processing	Elective compulsory	4	64	
		NXC6021	Failure of Polymers	Elective compulsory	4	64	
		QXU6028	Polymer Devices	Elective compulsory	3	48	
	Comprehensive Practice	NXC0001	Scientific Research	Compulsory	1	16	Scientific research training needs affirmation. Knowledge practice and industrial practice cant be affirmed as Scientific research training.
	Final project Design/Thesis for Graduation	QXU6040	Polymer Engineering Project	Compulsory	5/10	80/160	Year-long module

Year 4 Autumn Semester（credits≥21）							
Module	Module Category	Module Code	Module Name	Category	Credits	Hour	Note
Total hours/ credits	≥352/21						
Personality Development Modules (elective)	Students are encouraged to choose the modules based on their own development and interests from comprehensive modules, extension modules. Complete 6 credits before graduation. Students are suggested to choose the modules taught in English from NPU and QMES elective module list published in the semester.						
Extension practices	To encourage students to participate in all kinds of activities linked with ideological education activities, public benefit activities, innovation and entrepreneurship activities, recreational activities, labor practice activities, social practice activities. The activities list will be published.						

Year 4 Spring Semester（credits≥5）							
Module	Module Category	Module Code	Module Name	Category	Credits	Hour	Note
Technical discipline modules	Final project Design/Thesis for Graduation	QXU6040	Polymer Engineering Project	Compulsory	5/10	80/160	Year-long module
Total hours/ credits	⩾80/5						
Personality Development Modules (elective)	Students are encouraged to choose the modules based on their own development and interests from comprehensive modules, extension modules. Complete 6 credits before graduation. Students are suggested to choose the modules taught in English from NPU and QMES elective module list published in the semester.						
Extension practices	To encourage students to participate in all kinds of activities linked with ideological education activities, public benefit activities, innovation and entrepreneurship activities, recreational activities, labor practice activities, social practice activities. The activities list will be published.						
Total hours/total credits: 2974+X/172+X (minimum 3070/178)							
Reference: Code QX modules are taught by QMUL. Code NX modules are taught by NPU. Code U modules are Chinese Compulsory modules, Mental Health, Military Theory modules from MoE, as well as some elective modules.							

3 Personal Administration

3.1 Account Information and Electronic Platforms

3.1.1 Student Number

You are issued with:

(1) a NPU student number

(2) a QMUL student number

(3) a username for QMUL resources: your QMUL username is NOT your QMUL student number.

NPU and QMUL have their own systems. You are assigned with both student numbers which enables your access to both universities. Prior to the commencement date of the first semester, emails of relevant information will be sent to your personal email address which you have submitted in advance. You are strongly advised to remember both student numbers and account-related information (username and password) for your own convenience.

3.1.2 Electronic Mail (E-mail)

You should have:

(1) a NPU email account

(2) a QMUL email account (https://mail.qmul.ac.uk)

How often should I check my email?

Emailing is the main channel of information exchange; therefore, it is important that you check and read your emails regularly. It is your responsibility to be aware of all the information sent to you. Having not checked your email is not a valid excuse.

What if I cannot log in to my email via Authenticator?

If you have problems using Microsoft Authenticator to log in to your QM email, please contact QMUL ITS Live Chat. (https://www.qmul.ac.uk/its/), then find (https://www.qmul.ac.uk/its/services- channels/its-live-chat/). It is a live conversation with London IT service.

How can I make checking my email more convenient?

If it is more convenient for you to check only one mailbox, you can set your QMUL email to forward to any other of your email addresses. But it's ONLY for checking conveniently. You must

use QMUL email to send and reply to emails.

To forward your QMUL email, find Outlook setting → search forwarding → enable forwarding → add any email address you want → save and start forwarding

What is the correct way to write an email to a member of staff?

Email is a form of written communication and, like all forms of communication, works best when some general principles are followed:

• Only send emails from either your QMUL or NPU email address. Staff are not obliged to answer emails sent from other addresses.

• Compose your email properly (see below for example). This is a matter of courtesy and an opportunity to practice a particular form of communication.

• Write in full sentences, without abbreviations and slang.

What does a good email look like?

Dear <insert staff name here>

< the following is an example>

My QM student number is xxxxxxx. I am from group M3 of English module. In my group, we have a problem because two of our members are sick and cannot take part in the group work. Their name and student number are：xxxxxxxxx.

Could you please let us know what should we do?

Best wishes

<insert your name here>

This email is courteous, brief, and contains information that a member of staff needs to follow up on the question. Please be aware that always include your name and QMUL (or NPU) student number when you write to any member of staff. Failure to provide relevant and valid information will result in a delayed response. Also, poorly expressed emails may be neglected.

How long does it take to receive a response?

• Please be reasonable in your expectation of reply time. Especially, be mindful of the time difference between China and the UK. Also, it is expected that no one works out of office hours, including weekends and national (and bank) holidays.

• Usually, 3-5 working days for receiving a response are expected. Do not leave it until the last minute to write to a member of staff. We are here to help you. Please notify us in good time of any

questions.

• Due to the huge number of emails being received daily, any member of staff is not obligated to reply to every single email. Usually, some generally reported issues are discussed in group chats or in the class. However, it is your responsibility to find suitable opportunities to have your issues raised.

3.1.3 QMplus

What is QMplus?

QMplus (QMplus.qmul.ac.uk) is the QMUL virtual learning platform which is specifically designed to be an extension for you to study outside the classroom. It is vital for you to understand self-learning and familiarise yourself with QMplus. It provides you with access to useful learning materials, module information, e-books, recent updates, discussion forums, assessment submissions, and plagiarism checks (Turnitin), etc. This virtual learning platform creates a sound environment that enables communication between teachers and students, which has been a significant part of higher education in the contemporary information technology society. Being able to use, handle and research correctly via online databases or various platforms is the key to succeeding in your degree.

How do I log in to QMplus and what is the SSPR Service?

At the beginning of the first semester, you will receive an account activation email which is sent automatically from the system once you have completed your online enrolment. Your personal account information with temporary login details will be included in relevant emails. You are strongly advised to register yourself for the Self-Service Password Reset (SSPR), which is designed to help you reset your password. Please register as soon as you receive account activation emails from us. Details of registration will be introduced to you at the beginning of the semester.

For further QMplus enquiries please contact QMUL Xi'an Office <sems-qmes-xian-admin@qmul.ac.uk>.

3.1.4 MySIS

What is MySIS?

MySIS (https://mysis.qmul.ac.uk) is the QMUL student information system, in which you can check your past academic achievements and transcripts.

How often should I check MySIS?

You should check it for online enrolment and when you need to find personal records upon any

requirements. However, information on MySIS is not updated on a rolling basis. It is usually modified towards the end of a semester/ academic year.

Online Enrolment on MySiS

You are required to enrol in the QMUL system via MySIS at the beginning of your first year and you will be required to re-enrol to the system at the beginning of each academic year. You will be able to check your personal contact information in the system, and you are responsible for keeping your information updated. Please be aware of announcements of enrolment made by QMUL staff and it is your responsibility to complete them in a timely manner. Failing to enrol on time may cause issues that may affect your right to study with us.

Who should I contact if I spot incorrect information on my record?

If there are any problems, email QMUL Xi'an Office <sems-qmes-xian-admin@qmul.ac.uk> copied to Nabil Cassim <n.cassim@qmul.ac.uk> . You should put 'Problem with MySIS' in the subject line of the email.

How do I check and get my QMUL transcript and status?

You need to log in MySIS and find "my HEAR" which will connect you to the login page of the Gradintelligence website. Or you may directly go to Gradintelligence website (gradintel.com), use your QMUL account to log in and then you can download transcripts and study status letters. Instructions on how to activate your Gradintelligence account and get your official QMUL transcript can be found on the QMES website (https://qm.nwpu.edu.cn/info/3291/34236.htm). For provisional transcript only, please contact QMUL Xi'an office <sems-qmes-xian-admin @ qmul.ac.uk>

How do I get my Certificate of Full English Teaching?

Please find QMUL Xi'an Office in Teaching East building A403, or email your Chinese name with Pinyin, NPU student number together with QM student number to QMUL Xi'an Office <sems-qmes-xian-admin@qmul.ac.uk>.

3.2 Attendance and Exam Postponement

You must attend all lectures, tutorials, laboratories, and other practical sessions associated with your programme of study. Student attendance is monitored. Please be aware that in case of reporting an absence or applying for a leave, it is your responsibility to complete the entire procedure and it is

your responsibility to catch up on the work you have missed.

What is the procedure for reporting absence/applying for leave?

For lectures/tutorials/experimental sessions/any non-assessment hours,

For non-QXU module

• You should first contact your counsellor (辅导员) at your earliest time to report your absence/ apply for a leave with a valid reason. Get your leave note signed by your counsellor (辅导员签字后的请假条)

For QXU modules,

if you are unable to attend for any reason please follow this procedure:

Official absence (competition, recruitment, absence for sustained illness etc.)

Speak to your counsellor--→Get a permission note--→Email the permission note from your QM account to the QMES office: 1749018778@qq.com

• Students MUST avoid being absent for any assessment or part of the assessment otherwise they need to go through the extenuating circumstances (EC) procedure.

For in-class test/exams/any hour or any assessment which contributes to the final mark, the absence/leave will be dealt with as an extenuating circumstance. See below 3.2.1.

What will happen if I am absent without explanation?

If you are persistently absent without giving a satisfactory explanation and evidence, you may be deregistered from the module and barred from sitting the end-of-semester examination(s). In some modules, attendance counts to your final mark. Failing to attend any sessions is at your own risk and responsibility.

What should I do if my absence is caused by an unexpected incident?

If you cannot attend any sessions in your programme of study due to illness or other valid reasons, you must notify the counsellor, module teacher and a member of staff in the QM office as early as possible to avoid any deduction of the mark.

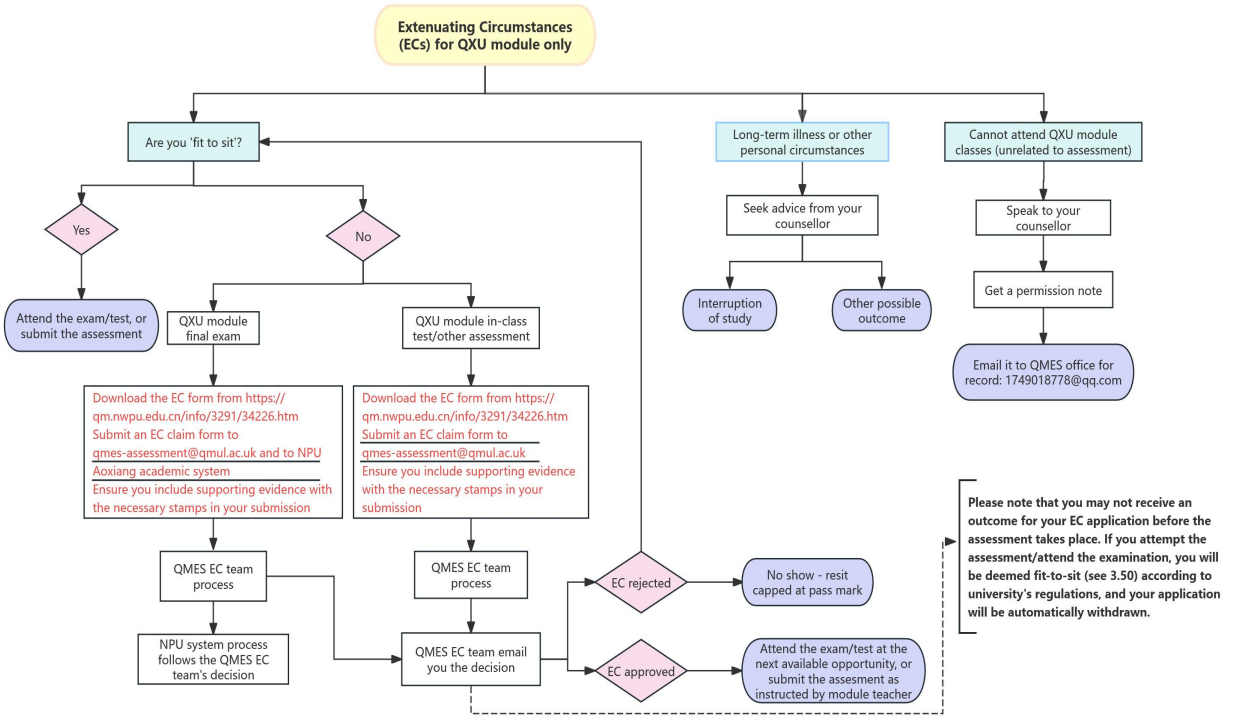
3.2.1 Extenuating Circumstances (ECs)

Extenuating circumstances - commonly referred to as ECs - are " circumstances that are outside a student's control and which may have a negative impact on a student's ability to undertake or complete any assessment so as to cast doubt the likely validity of the assessment as a measure of the student's achievement.," (QMUL Academic Regulations, Section 3) . Extenuating circumstances may include medical and personal circumstances such as bereavement, but do not include events

such as holidays, misreading or missing timetable updates, workload (academic work and formal employment), computer problems, or not being aware of rules, regulations, or procedures.

If a student is experiencing any difficulties, they must tell someone at the earliest time in order to get the appropriate advice and assistance. Normally this would be the student's counsellor or another member of staff in the school. Unless students report their extenuating circumstances formally at the time of the assessment, then it is very difficult for the school to offer support. A student must submit any claim for extenuating circumstances in writing through the official method (outlined in the next section). A claim should be submitted as soon as possible after the assessment (if the circumstances were not known in advance, e.g., suddenly falling ill), and in no case later than three working days before the relevant meeting of the appropriate Subject Examination Board's Extenuating Circumstances Sub-board.

How to submit an EC application?



How to make a claim for extenuating circumstances?

Extenuating Circumstances Board meetings are held regularly which are aimed at reviewing and approving students' applications. For raising applications, please refer to the flowchart above for information. Also further information on extenuating circumstances is available on the Advice and Counselling website (https://www.qmul.ac.uk/welfare/) and students should also seek advice from staff in the school. Students are strongly advised to read the Advice and Counselling Extenuating Circumstances Guide which can be found on the QMES website (https://qm.nwpu.edu.cn/ info/3291/34226.htm).

3.3 Deregistration

The school has the right to deregister a student from QMES. For more details, please refer to QMES academic regulations.

3.4 Interruption of Studies

What is an 'Interruption of Studies'?

To interrupt your studies means to put them 'on hold' and you may return to resume your study when the interruption ends. The interruption period can only be 12 or 24 calendar months. Interruption of studies does not give you any extra time to complete coursework or a project; it is not an extension.

When is an Interruption of Studies granted?

Interruption of studies is only granted in serious cases where for example you have been very ill and need recovery time. Evidence and approval from your parents will need to be presented to the school. Your counsellor shall be the one to manage initial discussions.

Are there other consequences to interrupting my studies?

During the period of interruption, students are not allowed to use the University facilities.

How do I apply to interrupt my studies?

If you wish to interrupt your studies, you should see your counsellor and the NPU Joint Education Institution Director, or his/ her designated deputy, who will discuss it with you.

Then you need to complete the Interruption of Studies procedure with both NPU and QMUL:

1) For details of the NPU procedure, please refer to the general NPU Student Handbook.

2) You will need to complete a QMUL Interruption of Studies Application form. This is

available from QMUL Xi'an Office <sems-qmes-xian-admin@qmul.ac.uk> and Nabil Cassim <n.cassim@qmul.ac.uk> at QMES.

The interruption will not be granted immediately. You will need to wait for the outcome from the Student Registration and Status Committee (SRSC) which will take place regularly.

3.5 Withdrawal from QMES

Can I withdraw from my programme of study once I have started it?

If you wish to withdraw from your degree then you must see your counsellor, who will refer the matter to the Vice Dean responsible for teaching affairs. If you decide to withdraw then you will also need to complete a QMUL Withdrawal form which is available from QMUL Xi'an Office < sems-qmes-xian-admin@qmul.ac.uk> and Nabil Cassim < n.cassim@qmul.ac.uk> at QMES.

If you withdraw from QMES early, you will not receive any form of exit certificate, but only a transcript listing the courses taken to date, with grades.

3.6 QMUL Library

What resources are available to me through the QMUL Library?

The QMUL Library has invested heavily in eBooks and journals that you can access remotely, which will be valuable resources throughout your degree. Please see the documentation about the QMUL library on MySIS for more information.

How do I access the QMUL Library remotely?

You may access the QMUL Library from the Library homepage (library.qmul.ac.uk), through which you have access to a wide range of electronic materials and 'help' resources. For some access, you will need to log in by using your library barcode (log in MySIS https://mysis.qmul.ac.uk with your QM username and password to find the barcode) which may be introduced to you at the beginning of the semester, please mind related announcements in the QQ group chat. Also, some of the library pages are public access, but if you navigate into restricted access pages, you will be asked to log in.

3.7 QMUL IT Services

The IT Helpdesk is able to provide support or give you advice on any IT related subjects.

Telephone: +44(0)20 7882 8888 (24/7)

Email: its-helpdesk@qmul.ac.uk

Self Service: https://helpdesk.qmul.ac.uk/

For further information, go to http://www.its.qmul.ac.uk/services/students/

However, for a quick response, please reach out to the school's QM office (Teaching East building A403) or Nabil Cassim< n.cassim@qmul.ac.uk>

Also, QMUL has launched the AskQM system which can provide help too. Please check below for further information https://mp.weixin.qq.com/s/CddPnZjKEyqSr0-07Ocbow.

3.8 Working in Laboratories

1) Undergraduate students are not permitted to work in any room or laboratory at any time outside scheduled classes unless the responsible technician or academic staff member is present, and a Risk Assessment has been carried out.

2) Nobody is permitted to work alone where any potentially dangerous situation exists, such as electrical hazard, explosion or implosion hazard, chemical hazard, or mechanical or structural hazard. Exceptionally, working alone in laboratories may be authorized by written permission only by a supervisor and Head of School or School Safety Advisor, after appropriate risk assessment. As a guide, hazards are deemed to exist in any situation not normally found in domestic households.

3) The School Safety Advisor must be informed in advance of any proposed work which may involve unusual or severe hazards whether in or outside the University. Risk assessments must be carried out for all laboratory or workshop procedures.

4) Protective clothing, such as overalls or a laboratory coat and glasses/goggles, should be worn at all times when working in the laboratories. Approved steel toe-capped footwear must be worn at all times in workshops, with closed-toed shoes to be worn in laboratories. You will be asked to leave the workshop/laboratory if you do not wear suitable footwear. Wear heat-resistant gloves when using ovens and furnaces. Do not touch equipment or objects in hot areas without first checking that they are cool. Hot items should be clearly marked and kept in safe areas. It should be assumed that safety glasses/goggles are worn at all times unless directed by a specific risk assessment not to do so.

5) Chemicals are particularly hazardous. You should not handle or use any chemicals until you have been given the proper safety precautions and completed a thorough risk assessment that includes a COSHH assessment (COSHH = Control of Substances Hazardous to Health).

6) No machine, engine or equipment is to be used until you have been fully instructed in its use, as incorrect operation may be dangerous. If in doubt, ask a member of staff.

7) All injuries, even minor ones such as cut fingers, must be reported to the school office, and treated by a qualified First aider or hospital. All spillages must be attended to and cleared immediately, and all breakages/damages must be reported immediately.

8) Care must be taken when using compressed air: IT CAN KILL. Fume cupboards and fume extractors must be used to clear fumes from work areas.

9) All guards must be in place before an engine or machine is started. Guards are NOT to be removed.

10) If you are doubtful about the safety of anything you are asked to do, you have a DUTY to refuse to do it until you have been properly instructed. If you come across a situation that you think is unsafe, you have a DUTY to report it to a member of staff.

4 Queen Mary University of London Assessment Regulations

4.1 Academic Misconduct Policy

Where a student commits an assessment offence on an individual module, that offence shall be investigated by the Academic Misconduct Officer of the school.

Scope

Allegations of any of the following shall be dealt with under the Academic Misconduct Policy:

i. breach of any section of the Academic Regulations relating to the conduct of assessment.

ii. misconduct relating to an invigilated examination or in-class test:

a. unauthorised access to an examination paper or venue before an examination.

b. forgery of an examination timetable produced by Queen Mary.

c. removal of a question paper, answer script, or other examination stationery from an examination venue.

d. causing a disturbance during an examination, either physically, verbally, or through an electronic device.

e. refusal to cooperate with an invigilator, or to follow an invigilator's instructions.

f. possession of unauthorised material while under examination conditions, or leaving unauthorised material in an examination venue (including cloakrooms and toilets).

g. access, possession, or use of unauthorised material on a computer, mobile telephone, or other electronic device during an examination.

h. communication with another candidate while under examination conditions.

i. copying, or attempting to copy, the work of another candidate.

j. having writing on the body in an examination venue.

iii. plagiarism (including self-plagiarism).

iv. fraudulent reporting of source material.

v. fraudulent reporting of experimental results, research, or other investigative work.

vi. collusion.

vii. use, or attempted use, of a ghost-writing service or third-party for any part of assessment.

viii. impersonation of another student in an examination or assessment, or the employment of

an impersonator in an examination or assessment.

ix. Unauthorised or unacknowledged text manipulation which undermines the integrity of an assessment (including the use of paraphrasing software, generative artificial intelligence or machine translation such that the work submitted cannot be considered wholly the student's own).

This list is non-exhaustive, and any other activity which undermines the integrity of an assessment and/or attempts to gain undue advantage in an assessment may also be considered academic misconduct.

3. The Academic Misconduct Policy applies to all students, irrespective of cohort. It is normal practice that penalties for second or subsequent instances of academic misconduct are escalated.

4. There is no statute of limitations on application of the Academic Misconduct Policy. The Policy may be applied retrospectively if a graduate is alleged to have committed academic misconduct while studying at Queen Mary. Under certain circumstances this may result in the revocation or reclassification of an award.

What is plagiarism?

Queen Mary defines 'plagiarism' as presenting someone else's work as one's own, irrespective of intention. Close paraphrasing; copying from the work of another person, including another student; using the ideas of another person without proper acknowledgement; and repeating work that you have previously submitted – at Queen Mary or at another institution – without properly referencing yourself (known as 'self-plagiarism') also constitute plagiarism.

Plagiarism is a serious examination offence, it is important you understand well what it is, and how to avoid it.

How can I avoid plagiarism?

Ensure that you paraphrase, synthesise, and reference information appropriately as outlined in your language, communication, and skills modules. Never copy information directly. Do not ever copy other people's work, either from students in your year or from previous students' coursework. If you are ever in doubt, ask your Lecturer. Do not attempt to use plagiarism checkers to check your work prior to submission as this may lead to unusually high plagiarism rates and will be investigated as academic misconduct.

What will happen if I commit plagiarism?

You are liable to be investigated under an Examination Offences Panel and the penalty can be severe. Penalties include:

i. A formal warning.

ii. A requirement that the student resubmit the relevant piece(s) of assessment by a specified deadline with no cap on the mark that may be obtained.

iii. A requirement that the student resubmit the relevant piece(s) of assessment by a specified deadline with the resubmission mark capped at the minimum pass mark.

iv. A mark of 0 for the relevant piece(s) of assessment, but if the module is failed the student may reattempt at the next opportunity.

v. A mark of 0 in the module of which the assessment forms a part, with the module mark capped on any reattempt at the minimum pass mark.

vi. The overall classification of Honours to be reduced by one grade with an explanation to be provided as to why the calculated mark does not match the Honours awarded.

vii. Recommendation to the Steering Committee that the student be expelled from the two universities. The Steering Committee decision must be ratified by the Principal/President of both universities before the student can be expelled.

Further information about the Academic misconduct policy and processes can be found online here.(https://www.qmul.ac.uk/governance-and-legal-services/student-appeals/academic-misconduct/)

4.2 QMUL Module Examination Regulations

Article 1: To be eligible to take the examination, students must have an NPU Campus Card or ID card. Before granting them admission to the examination, the invigilator will verify their identity. Students who do not have an identification document will not be allowed to take the examination.

Article 2: Students should arrive at the examination venue 15 minutes in advance; those who are late by 30 minutes or more will be disqualified from the examination, will not be allowed to enter the examination venue and will be treated as absent from the examination.

Article 3: A student who wishes to leave the examination venue temporarily may do so, with permission from an invigilator. A student who leaves an examination temporarily will be accompanied by an invigilator. Students cannot leave during the first 30 minutes or the last 10 minutes of an examination, though in exceptional circumstances related to illness or other unexpected causes, an invigilator may permit this.

Article 4: All stationery that students require for the examination must be visible to invigilators. If used, pencil cases and water cups/bottles that students bring into the examination venue must be transparent. Water bottles must not have any labels on them. Calculator covers are not allowed in the examination venue. Everything that is brought into the examination venue that is not permitted for use in the exam, including but not limited to backpacks, books/notes (both related and unrelated to the examination), electronic dictionaries/translators, mobile phones, wired/wireless headphones/earphones, and smart watches must be put in the location indicated by the invigilators.

Article 5: Students are not permitted to bring their own draft papers to the exam. Students must make sure all exam papers are intact and are not permitted to be removed from the examination venue. All exam papers (exam script, draft paper and any other relevant material) provided during the examination will be collected by the invigilators at the end of the examination.

Article 6: Put all bags, coats, and other belongings at the back/front of the room. An invigilator may inspect any item brought into an examination venue by a student and may require a student to empty their pockets. Failure to comply will be recorded by the invigilators and may be investigated

under the Academic Misconduct Policy.

Article 7: Students must sit according to the seating arrangement designated by the invigilators and position their identification document on the upper right or left side of their desks for checking by the invigilators.

Article 8: At the end of the exam, students must stop writing immediately, leave all exam papers and note paper visible on the desk, stay seated, remain quiet, wait for the papers to be collected and counted, before they are allowed to stand up and leave the examination venue.

Article 9: Potential academic offences will be monitored throughout the examination period by invigilators. For example, looking at another person's exam paper during an examination will be treated as an academic offence and the invigilator will record the student's incident on the examination record sheet, inform the student of this record, and it will be investigated under the Academic Misconduct Policy. The full list of examination offences can be found in QMUL's Academic Misconduct Policy.

Detailed information can be found below:

https://www.qmul.ac.uk/governance-and-legal-services/student-appeals/academic-misconduct/

5 Academic Regulations of QMUL Engineering School, NPU (Trial)

西北工业大学伦敦玛丽女王大学工程学院学业管理规定（试行）

Academic Regulations of QMUL Engineering School, NPU (Trial)

5.1 简介

此标准适用于西北工业大学（NPU）和伦敦玛丽女王大学（QMUL）之间的联合教育机构西北工业大学伦敦玛丽女王大学工程学院材料科学与工程和高分子材料与工程专业的学生，达到两校学位授予标准的学生可获得两校学位：西北工业大学工学学士学位和伦敦玛丽女王大学工学学士学位。

5.1 Introduction

These regulations apply to students enrolled on the double degree programmes in Materials Science and Engineering programme and Polymer Materials Science and Engineering programme between the two institutions, Queen Mary University of London (QMUL or Queen Mary) and Northwestern Polytechnical University (NPU) leading to the award of two degrees: BEng both from Queen Mary and NPU.

5.2 定义

5.2 Definition of terms

5.2.1 中文必修课程：教育部要求、符合中国相关法律及文化而设置的课程，但不属于英方学位课程。

5.2.1 Chinese compulsory modules: modules that are required by the Chinese Ministry of Education but do not form part of the Queen Mary award.

5.2.2 学科专业课程：指构成专业必要技术知识的课程。

5.2.2 Discipline modules: modules that are prescribed as constituting the necessary technical knowledge for the programme.

5.2.3 必修课程：培养方案所规定的通识通修、学科专业和综合实践课程。

5.2.3 Compulsory modules: general education modules, discipline modules and comprehensive practices modules stipulated by Education Plan.

5.2.4 中方学分：中方学分是指衡量在中方系统中用学时计算学生学习量的一种计量单位。在西北工业大学系统中，1 学分=16 学时。中方学分与英国系统中的英方学分不同。

5.2.4 Chinese Credits: Chinese credits are measures of load that are related to the contact hours in the Chinese system. 1 Chinese credit equals to 16 teaching contact hours in NPU system. These are different to UK credit in the UK system.

5.2.5 英方学分：英方学分用来衡量在英方系统中的学业水平。《伦敦玛丽女王大学学位学分框架》详细说明了获得伦敦玛丽女王大学学位的课程和课程的学分结构和等级。在伦敦玛丽女王大学系统中，1 学分=150 个学时（包括授课学时和自学学时）。

5.2.5 UK Credits: An indicator of the amount and level of learning. The structure of academic credit and levels as applied to modules and programmes leading to awards of Queen Mary are detailed in the Queen Mary Academic Credit Framework. 1 UK academic credit equals to 150 study hours (including contact hours and self-study hours).

5.2.6 重修：学生需要重新修习不及格课程，包括参与课程学习及实验，重修课程的考试成绩受限，不得高于双方成绩单上的及格线。

5.2.6 Retake: where a student must attempt a failed module again, including attending lectures and laboratories. Marks for retakes are capped to the pass mark of both universities and must not be higher than the pass mark for the transcripts of both universities.

5.2.7 补考：学生可以再次参加课程的考核，可以不参加课程学习和实验，除非课程成绩与实验出勤率相关。补考成绩受限，不得高于双方成绩单上的及格线。

5.2.7 Resit: where a student may attempt the assessment again for a module, but may not attend lectures and laboratories again, unless attendance at laboratories is specifically approved as being necessary to reattempt a failed module. Marks for resits are capped to the pass mark of both universities and must not be higher than the pass mark for the transcripts of both universities.

5.2.8 试读：学生因学业表现不佳（如 6.2 定义），可申请在相应专业降级试读一学年。

5.2.8 Probation: Due to poor academic performance (as defined in 6.2) in any year, students could apply to restudy for one academic year.

5.2.9 结业证书：西北工业大学颁发给修习完所有计划课程但部分课程未合格学生的证书。这些学生如在最长学习年限内，且在结业一年内，按照相关规定通过补考后，可申请补授学

位。

5.2.9 Jie Ye Zhengshu: a certificate awarded by NPU to students who have taken all modules in either of the two programmes but failed some modules. They can complete the degree if they pass the resit(s) within the maximum period of study and within one year after completing their studies.

5.2.10 最高分数受限：补考及重修课程成绩最高分不得超过双方成绩单及格线，且此成绩会计入伦敦玛丽女王大学学位等级评定。

5.2.10 Capped marks: the module mark on resits and retakes is “capped” at the minimum pass mark for the transcripts of both universities and in the calculation of the classification for the Queen Mary award.

5.2.11 学制：中国教育体系规定学习时限为 4 学年。

5.2.11 Year: study years on programme are numbered 1-4 to follow Chinese practice.

5.2.12 西工大毕业证书：证明学生已在西工大完成学习的学历凭证。

5.2.12 NPU diploma: Academic certificate proving that the students have completed their studies.

5.2.13 学位证书：毕业时颁发的授予学位（工学学士或理学硕士）证书，证明成功达到双学位的所有要求。

5.2.13 Degree Certificate: certificate issued on graduation for the awarded degree (BEng or MSc) on successful attainment of all requirements of the double degree.

5.3 录取

5.3 Admission

5.3.1 报考西北工业大学伦敦玛丽女王大学工程学院的学生需要参加普通高等学校招生全国统一考试，达到本科一批分数线及西北工业大学伦敦玛丽女王大学工程学院录取分数线。

5.3.1 In order to be eligible for admission to Year 1 of the undergraduate programme, a candidate shall have obtained the Chinese entry standard for key universities i.e. to take the National Higher Education Examinations and pass the benchmark set for QMES.

5.3.2 凡属弄虚作假、徇私舞弊取得学籍者，一经查实，学校取消其学籍。

5.3.2 Any student who secures admission to the programme on the basis of qualifications, documents or statements that are subsequently found to be false shall have his/her registration terminated, and shall accordingly cease to be a student.

5.4 专业学习

5.4 Programme of Study

5.4.1 最低学习年限为 4 学年。

5.4.1 The minimum period of study shall be four academic years.

5.4.2 最高学习年限为 6 学年。

5.4.2 The maximum period of study shall be six academic years.

5.4.3 学习年限包含休学和试读时间。

5.4.3 Periods of study shall include periods of interruption and probation.

5.4.4 专业学习内容的构成

（1）学习内容包含学院学术委员会制定的、英国伦敦玛丽女王大学及中国教育部批准开设的课程。

（2）专业课程明细会列出各门课程的学分。

5.4.4 Composition of the Programmes of Study

(1) The programmes of study will consist of programme-specific lists of compulsory modules published by the Joint Academic Committee and approved by Queen Mary in the UK and the Chinese Ministry of Education in China.

(2) The list of modules will show the number of credits allocated to each module.

5.4.5 转专业

符合学校规定，需转专业者，只能在本学院两个本科专业之间互转，不可转入学校其他专业，且学生在学期间只能转专业一次。由学生本人提出申请，学院签署意见同意，学校审批后方可转专业。

5.4.5 Programme transfer

Any student who would like to apply for a programme transfer shall do so in accordance with NPU transfer regulations and may only transfer between the two BEng programmes of QMES. A student has only one transfer throughout the whole four-year period of study. The student must submit the transfer application themselves; it must then be approved by the QMES Academic Committee and the Teaching Affairs Office of NPU.

5.5 学籍注册

5.5 Enrolment

5.5.1 学生需要在入学时同时注册西北工业大学及伦敦玛丽女王大学的学籍，学生需要在每一学年的开始报到、确认注册。成功支付相应学年的学费是入学的条件。

5.5.1 Students are required to enroll at the beginning of their programme of study at both NPU and Queen Mary, and to confirm their enrolment at the beginning of each academic year. Enrolment is conditional to the payment of the fee for the corresponding academic year.

5.5.2 新生在复查体检中发现患有疾病者，经校医院或其他指定医院诊断认为不宜在校学习，由本人申请，经学校批准，允许保留入学资格一年。

保留入学资格者不具有学籍，不享受在校学生待遇，并应在两周内办理离校手续，回家治疗。两周内不办理离校手续者取消保留入学资格。

保留入学资格的学生，必须在下一学年开学前一周，持县级以上医院诊断证明，经校医院或指定医院复查合格，报西北工业大学教务处和学院批准后，重新办理入学手续，编入原录取专业下一年级学习。复查不合格或逾期不办理入学手续者，取消入学资格。

5.5.2 If a medical examination by NPU Hospital or another designated hospital determines that a student's health condition(s) means that they are not fit to study, the student may apply for interruption of studies for one year, with NPU's approval. Such a student is not registered and will not be granted the same access to resources or facilities as other students at NPU. The student should submit their application to leave the campus within two weeks; otherwise, NPU has the right to cancel any interruption of studies which may have been granted.

The interrupted student must provide a medical certificate from a hospital above county-level that confirms their fitness to study in order to resume their studies. This must be provided not later than one week before the start of the new academic year. The student will then have a medical re-examination at the NPU Hospital or another designated hospital. If the Teaching Affairs Office of NPU and the Teaching Affairs Office of QMES are satisfied with the results of that re-examination the student shall be registered and begin learning with the students of the subsequent academic year. Otherwise, NPU has the right to deregister the student.

5.6 考核

5.6 Assessment

5.6.1 西北工业大学和伦敦玛丽女王大学采用不同的考试成绩评分体系。用于课程测验或者课程整体分数的评分标准由学院学术委员会决定。具体成绩评分体系见课程明细。西北工业大学和伦敦玛丽女王大学的成绩转换方法如下：

（1）在百分制的情况下，西北工业大学的及格线为 60%，伦敦玛丽女王大学的及格线为 40%。

（2）西北工业大学的优秀分数为 85%，伦敦玛丽女王大学的优秀分数为 70%（QMUL 分数划分标准详见 11.3）。

（3）不论采用何种标准，考试最高分数不得高于 100%，最低分数不得低于 0%。西北工业大学与伦敦玛丽女王大学的具体成绩转换以 11.1 和 11.2 成绩转换表为准。

（4）各门课程成绩由作业成绩及考试成绩组成，均为四舍五入后百分制中的整数，并转换为对方大学的成绩评分体系。

5.6.1 Different marking scales are used by NPU and QMUL. The marking scale used for assessment within a module, and for the overall module mark, is determined by the Academic Committee and is specified in the module specification. The relationship between the marks is:

(1) A pass mark at NPU is 60% and at QMUL is 40% for modules at all levels.

(2) The mark showing distinction performance at NPU is 85% and an A grade at QMUL is 70% (defined in 11.3).

(3) Irrespective of the scale being used, no mark can be greater than 100% or less than 0%. The conversion between NPU and QMUL marks are specified in 11.1 and 11.2.

(4) Module marks for all modules are a combination of coursework marks and examination marks. The module mark is specified to the nearest integer out of 100 and converted to the scale of the other university.

5.6.2 补考

（1）如学生某课程成绩不及格，根据课程说明里明确规定的方法重新进行补考或评估。补考的综合成绩不得高于双方成绩单上的及格线。

（2）学生除服役或实习在外不可返回等特殊情况外，需在最近一个补考时间补考。考试委员会的主席有权延迟学生的补考。“补考时间”由考试委员会决定并受到教学安排的影响，

补考安排在下一学期开学初进行。

（3）一门课程只能补考一次。

（4）已通过的课程不能补考或重修。

5.6.2 Resit

(1) Where a student has failed a module, s/he is required either to undertake a reassessment or to resit the components that have failed, depending on the reassessment methodology stipulated in the module specification. The overall module mark attainable for any resit shall be capped at the minimum pass mark on the transcripts for both universities.

(2) Resits shall be taken at the next available opportunity except that, in exceptional circumstances, the Chair of the Subject Examination Board shall have discretion to permit a student to defer his/her resit(s). Reasons may include, for example, military service or approved industrial placements. The “next available opportunity” for resit examinations will be determined by the Subject Examination Board and is informed by the teaching timetable and will be at the beginning of the next semester.

(3) A student may have one resit attempt at a module.

(4) A module that has been passed shall not be reset or retaken.

5.6.3 重修

（1）如补考不及格，需在下一个学年重修该课程。重修课程考试成绩受限。

（2）重修过程中如果课程被取消或替换，会给学生再安排一次补考机会。

（3）有下列情况者，不得参加考核，该课程或环节必须重修。重修成绩受限。学生在改正[C]、[D]或[E]项后，方可允许参加考试。

A）学生无故缺课，累计超过该门课程（包括实验、实习、毕业设计等）教学时数的三分之一者；

B）随机抽查有三次旷课者；

C）有实验的课程，没完成规定的实验或缺交实验报告三分之一者；

D）课程作业无故缺交三分之一者；

E）实践性教学环节未通过者。

5.6.3 Retake

(1) If the one resit attempt is failed the student will be required to retake the module in the following academic year; such a retake will be capped.

(2) Where a module is withdrawn, an examination will be set to give students an additional resit attempt.

(3) A student who falls into one of the categories below will not be allowed to take the examination for the corresponding module and will need to retake the module. The retake attempt will be capped. The deficiency in [C], [D] or [E] must be rectified before the student is allowed to sit the examination.

A) Does not attend two-thirds of lectures or the laboratory hours for a module without permission;

B) Misses three lectures where random checks on attendance are carried out;

C) Does not submit at least two-thirds of the laboratory reports for a module;

D) Does not submit at least two-thirds of the coursework for a module without permission;

E) Fails the practical component of a module.

5.6.4 特殊情况：

（1）普遍规则

（a）处理特殊情况的基本原则是伦敦玛丽女王大学规定适用于 QMUL 负责的课程，西北工业大学规定适用于 NPU 负责的课程。

（b）学生提交的特殊情况申请需由负责相应课程的大学按照其规定进行审议，结果须提交考试委员会。

（c）无论出于何种原因，无法按时参加考试或考核部分的学生必须在考试或考核前至少三天提交一份特殊情况申请和相关证据。由 QMUL 负责的课程，必须提交给 QMES Exam <qmes-assessment@qmul.ac.uk>.邮箱。由 NPU 负责的课程，申请提交给学生办公室和学生辅导员。如果学生不能按照规定提前提交书面申请，必须在考试前向 NPU 教务处提出口头申请，而后在头考前重新提交书面申请。申请一般在考试委员会开会前提交。

（d）特殊情况委员会将建议的决定汇报给考试委员会审议，考试委员会保留对该决定的权力。

（e）学生由于特殊情况没有参加考试或考核可以缓考，不需要重修课程及实验环节。缓考课程成绩计算课程平时成绩（或其他任何考核环节成绩）。缓考成绩不受限，最高分数可以是满分。

（2）对于 QMUL 负责的课程

（a）学生由于疾病或考试委员会可接受的原因，不能参加课程或完成考核，则需参加下

一次缓考。

（b）凡参加考试或提交考核报告的学生即被认定为能够参加考试或该评估，不再允许其提出特殊情况申请。

5.6.4 Extenuating circumstances (EC)

(1) General regulations for extenuating circumstances.

The fundamental principle for dealing with extenuating circumstances is that Queen Mary regulations apply to Queen Mary led modules while NPU regulations apply to NPU led modules.

Requests for extenuating circumstances shall be considered by the university teaching that module in accordance with its own policy and the decisions reported to the Subject Examination Board.

Students who cannot sit for an examination or other component of the assessment profile on time, for any reason, must submit an extenuating circumstances application and relevant evidence at least three days in advance of the assessment. In Queen Mary led modules this must be submitted to the extenuating circumstances committee via QMES Exam <qmes-assessment@qmul.ac.uk>. For NPU led module the EC is submitted to the student's councilor in the student office. If the students cannot submit written applications beforehand as stipulated, they must make oral applications to the Teaching Affairs Office of NPU before the exam and resubmit written applications afterwards before the first take. Submission would normally be expected before the Subject Examination Board sits.

The relevant committee will recommend a decision for consideration at the Subject Examination Board which maintains the authority over the decision.

where a student may attempt the missed final module examination or assessment due to extenuating circumstances without attending lectures and laboratories again. In this case, marks for coursework (or any assessment element) will stand in the assessment and marks for first sits are uncapped.

(2) For Queen Mary led modules:

A student who, through illness or other reason acceptable to the Subject Examination Board, is prevented from attending or completing any assessment may be permitted to re-present him/herself at the next available opportunity as if for the first time.

A student who attends an examination or makes an assessment submission will normally be

deemed fit to take that assessment and will not subsequently be allowed to claim extenuating circumstances.

5.6.5 课程考核

（1）每个课程的考核管理应遵循负责该课程教学的学校的条例，也遵循该学校条例进行修订。

（2）NPU 教务处和/或伦敦玛丽女王大学教务处可批准并安排学生在特殊条件下参加考核或考试。

5.6.5 Module assessment

（1）The management of assessments for each module on the programme shall be governed by the regulations of the institution responsible for teaching that module, amended by these special regulations.

（2）The Teaching Affairs Office of NPU, and/or with the Academic Registrar of Queen Mary, may approve arrangements for a student who is required to take his/her assessment or examination under special conditions.

5.6.6 考试作弊

（1）如果学生被怀疑在考试考核中有不端行为，则应由教授该课程的大学根据其处理学术不端行为的政策进行处理。

（2）如学生违反两校的考试纪律章程，学术委员会负责监督两校的调查处理程序，并决定由两所大学中的哪方根据其政策处理该不端行为。

5.6.6 Assessment Misconduct

(1) Where a student is suspected of having committed assessment misconduct in an assessment, this shall be dealt with by the university teaching that module under its normal policy for assessment misconduct.

(2) If a student is found to have breached the assessment regulations of both institutions, the matter will be referred to the Academic Committee which will have oversight of the investigation process at both QMUL and NPU and will determine which of the two universities will deal with the offence under its normal policy for assessment misconduct.

5.6.7 第三方考试委员会委员

（1）每所学校必须任命至少一名第三方考试委员会委员，并在有必要的情况下，增加考试委员会委员数量；

（2）所有第三方考试委员会委员的任命必须得到两校同意。

5.6.7 External Examiners

(1) Each university must appoint at least one external examiner to its programmes, and may appoint additional external examiners as deemed necessary.

(2) All external examiner appointments must be approved by both universities.

5.7 学业预警、退学与试读

5.7 Academic Early Warning, Withdrawal/deregistration and Probation

5.7.1 学生具有以下情况之一者，学院将予以学业预警，并以书面形式通知本人及家长或其他监护人

（1）在一学期内，不及格必修课程达到 2 门或 6 学分（含）者；

（2）入学以来，不及格必修课程学分累计达 10 学分（不含重考后及格课程）以上（含 10 学分）者。

5.7.1 A student who falls into one of the categories below will be given an academic early warning by the Engineering School. The written warning is to be sent to the students and their parents or other custodians:

(1) Fails 2 modules or above or 6 credits or above in compulsory modules within one semester;

(2) Fails 10 credits or above in compulsory modules (excluding modules passed at a resit) since enrollment.

5.7.2 学生具有以下情况之一或多项者，应予退学：

（1）在规定的 6 年学习年限内不能完成学业者；

（2）学科专业课程或中文必修课程中不及格学分累计达 30 学分（不含重考后及格课程）以上（含 30 学分）者；

（3）未经批准在一学期内所修课程的中国学分未达到该学期应修总学分（包含中文必修课）的 50%者；

（4）休学、服兵役期满，在学校规定期限内未提出复学申请或申请复学经复查不合格者；

（5）经校医院或指定医院确诊，患有疾病，或因意外伤残无法继续学习者；

（6）本人申请退学者；

（7）未请假离校，连续两周未参加学校规定的教学活动者；

（8）不办理相关手续或办理相关手续未获批准而超过规定注册时间两周未注册者；

（9）因其他特殊原因，学校综合考核认为不适宜在校继续学习者。

5.7.2 A student who falls into one or more of the categories below will be deregistered from the programme of study:

(1) Fails to complete the degree within the maximum period of study;

(2) Whose failed Chinese credits accumulate to 30 (including 30 credits; excluding modules passed at a resit) in technical or Chinese compulsory modules;

(3) Does not achieve 50% of the Chinese credits (including Chinese compulsory modules) in a semester without permission;

(4) Fails to apply by the stipulated deadline for resumption of study after the expiration of an interruption of studies or service in the army;

(5) Unfit to study because of illness according to NPU Hospital or other designated hospitals; or cannot resume studies because of injury;

(6) Applies for withdrawal himself/herself;

(7) Is absent for a continuous period of two weeks without permission;

(8) Fails to enroll two weeks after the specified registered time;

(9) Is considered by NPU not fit to study through medical condition or misconduct.

5.7.3 学生退学由学院院长、学院主管学生副院长和西北工业大学教务处签署意见，学校审批。

对退学的学生，由学校出具退学决定书并送交本人，同时报学校所在地省级教育行政部门备案。因学生个人原因无法送交本人的，则在校内发布公告，自发出公告之日起 7 天之后，即视为送交。

5.7.3 Withdrawal or deregistration of a student requires approval from the Dean of QMES, the Vice Dean for Students of QMES and the Teaching Affairs Office of NPU. NPU will send a written deregistration notice to the student and report the deregistration to the local Education Department at the same time. If for any reason the deregistration notice cannot be sent to the student, an announcement within NPU will be released and after seven days have passed it will be considered that the notice has been sent to the student.

5.7.4 因学业成绩原因（本条款 6.2 所示）而达到退学标准的学生，经本人申请，学院同意，学院院长、学院主管学生副院长和西北工业大学教务处审批后，可在相应专业降级试读一年。试读期间应按规定缴纳全学年费用。

5.7.4 Students who meet deregistration conditions because of poor academic performance (defined in 6.2) can apply for one-year probation in their programme. The application must be approved by the Dean of QMES, the Vice Dean for Students of QMES and the Teaching Affairs Office of NPU. Full tuition fees are required during the probation period.

5.7.5 学生在校学习期间，只能试读一次，试读期为一学年。试读学年两个学期内学生只需修习未及格的课程，之前已及格的课程无需再修习。如仍出现 6.2 所规定情况之一者，应予退学。

5.7.5 A student can only have one academic year of probation. During that year a student can study only the modules that they had failed and cannot study the modules that they have passed. A student who still falls into one of the categories defined above (6.2) at the end of the probation year will be deregistered from the programme of study.

5.7.6 学生退学或其他原因处理离校的善后问题，按下列规定办理：

（1）退学学生接到退学决定书后两周内办理相关手续离校；

（2）退学学生发给退学证明；对于已学满一年以上者，学校按其学习年限和成绩发给相应年限的肄业证书。

5.7.6 Other issues related to withdrawal should be dealt with according to the rules below:

(1) A student who gets a deregistration notice should proceed with campus leaving procedures within two weeks;

2) NPU will send a withdrawal certificate to the student concerned. Where the student has completed at least one year of study NPU will instead send a letter of attendance to the student.

5.8 毕业、结业、肄业、休学

5.8 Graduation, Completion, Non-completion and Interruption

5.8.1 毕业前，学校会对学生在校期间的表现做出全面鉴定。

5.8.1 The student councilor from NPU shall complete an overall appraisal form before students graduate. This will be entered into the student file.

5.8.2 学院应在最后学期对毕业班学生进行毕业资格审查。有正式学籍的学生，在学校规定学习年限内，修完培养方案规定的课程（环节）并获得相应学分，德、智、体达到毕业要求，准予毕业，由西北工业大学颁发毕业证书。

5.8.2 Final year students will have a qualification examination in their last semester. Registered

students who have accomplished required modules and met graduation requirements within a specified time will be awarded a diploma from NPU.

5.8.3 在规定学制时间内，所获学分超过专业培养方案规定的最低总学分 90%（含）的，经校长办公会审议通过后准予结业。结业生发给西北工业大学结业证书，并可在结业起一年内返校补考不合格课程，成绩合格者，可换发西北工业大学毕业证书、学位证书以及伦敦玛丽女王大学学位证书。超过一年时间，学校不再给予补考机会。

5.8.3 A student who within the prescribed period of study, has obtained credits equal to or above 90% of the minimum total credits required in the programme specification may be permitted to complete the programme with a status of Completion. Such a student can receive an NPU Jie Ye Zhengshu and can take a resit within one year of completion. If the resit is passed, the student can be awarded the NPU Diploma, the NPU Award, and hence also the Queen Mary Award. NPU shall not allow any student to take a resit beyond one year of completion.

5.8.4 实习、毕业设计（论文）不及格者也可申请结业。结业生可在结业起一年内申请补作一次。其往返路费及材料费、资料费、上机费、答辩费等各项费用均自理。成绩及格，可在规定时间内换发西北工业大学毕业证书、学位证书，以及伦敦玛丽女王大学学位证书。以上申请结业学生，必须在学校规定的时限内由本人提交书面申请，学院主管院长同意，报西北工业大学教务处及伦敦玛丽女王大学教务主任审批。

5.8.4 A student who fails in internship or final year project may also apply for Completion. Such a student may resit the internship and/or project once only, within one year after completion. The cost, including the fees for transportation, materials, experiments, etc. shall be covered by the student. Successful students can be awarded the NPU Degree, and hence also the Queen Mary award.

5.8.5 受到留校察看处分、毕业资格审查前未被解除的毕业生，当年做结业处理，发给西北工业大学结业证书。结业后一年、最长学习年限内，经学校审批终止处分者，可换发西北工业大学毕业证书。

5.8.5 Students who are placed on disciplinary probation in their final year cannot have it removed before graduation and can only apply for Jie Ye Zhengshu. These students can apply for the replacement of Jie Ye Zhengshu with an NPU diploma within one year of graduation as long as it is still within the maximum period of study.

5.8.6 学满一学年以上退学的学生，办理离校手续后可申请领取西北工业大学肄业证书。

5.8.6 A student who has studied at NPU for at least one year can apply for a letter of attendance after completing the leaving procedures.

5.8.7 学生因个人身心健康状况问题、自费出国留学或从事创新创业活动等原因不能在校学习，可以申请休学。休学一般以一年为限，累计不得超过两次。休学由学生本人申请、学院签署意见，报两校教务部进行审批。

5.8.7 Students who are unable to continue their studies on campus due to personal physical or mental health conditions, self-funded overseas study, or engagement in innovation and entrepreneurship activities may apply for a suspension of studies. The period of suspension is normally one academic year with no more than two suspensions in total. Suspension of studies is normally initiated by the student, endorsed by the College, and submitted to the Academic Affairs Offices of both universities for approval.

5.9 学士学位

5.9 Degree Requirements and Consideration for Honors

5.9.1 学生必须同时完成所有西北工业大学和伦敦玛丽女王大学所要求的学位授予条件，同时符合西北工业大学和伦敦玛丽女王大学本科毕业条件和学士学位授予规定，方可获得两校学位: 西北工业大学工学学士学位和伦敦玛丽女王大学工学学士学位。

5.9.1 To be awarded the double degree certificates of NPU and Queen Mary, a student must have completed all of the award requirements of both NPU and Queen Mary. Since the requirements for the award of the NPU degree require all modules to be passed, it is implicit that the award requirements for the QM degree are simultaneously met.

5.9.2 QMES 课程都不允许进行补偿或宽容性处理。

5.9.2 Compensation or condonement of module marks (under the definitions given by the Engineering Council) are not permitted under NPU regulations and thus are not permitted on any QMES programme.

5.9.3 学生未达到一方学位授予标准的，则被视为未达到另一方的学位授予标准。

5.9.3 A student who does not meet the requirements of the degree certificate of both universities cannot be awarded a bachelor degree by either institution.

5.9.4 西北工业大学提供的成绩单体现西北工业大学的成绩标准。

5.9.4 The transcript provided by NPU will show all marks on the Chinese scale.

5.9.5 伦敦玛丽女王大学提供的成绩单体现伦敦玛丽女王大学的成绩标准，并体现荣誉工程学士学位的等级。

5.9.5 The transcript provided by Queen Mary will show all marks on the UK scale plus an overall BEng Honours classification.

5.9.6 伦敦玛丽女王大学荣誉工程学士学位加权平均成绩可计算至小数点后第一位：

2021 级及之前年级

大一年级课程成绩：0*平均百分比

大二年级课程成绩：0.1*平均百分比

大三年级课程成绩：0.3*平均百分比

大四年级课程成绩：0.6*平均百分比

2022 级及之后年级

（1）大一年级第 3 等级课程成绩： 0* 平均百分比；

（2）大一年级第 4 等级课程成绩和大二年级计入伦敦玛丽女王大学学分的课程成绩：0.1* 平均百分比；

（3）大三年级计入伦敦玛丽女王大学学分的课程成绩： 0.3* 平均百分比；

（4）大四年级计入伦敦玛丽女王大学学分的课程成绩： 0.6* 平均百分比。

5.9.6 The BEng Honors of Queen Mary weighted average mark shall be calculated (to one decimal place) as follows:

For 2021 cohort and earlier cohorts:

(1) 0 * average % mark for Year 1 modules;

(2) 0.1* average % mark for Year 2 modules;

(3) 0.3* average % mark for Year 3 modules;

(4) 0.6 * average % mark for Year 4modules.

For 2022 cohort and later cohorts:

(1) 0 * average % mark for level 3 Year 1 modules;

(2) 0.1* average % mark for level 4 modules in Year 1 and all Queen Mary credit-bearing modules in Year 2 modules;

(3) 0.3* average % mark for all Queen Mary credit-bearing modules in Year 3 modules;

(4) 0.6 * average % mark for all Queen Mary credit-bearing modules in Year 4

5.9.7 伦敦玛丽女王大学荣誉工程学士学位的等级划分依据为荣誉工程学士学位加权平均

值：

(1) 一等：＝＞70.0；

(2) 二等上：60.0-69.9；

(3) 二等下：50.0-59.9；

(4) 三等：40.0-49.9。

5.9.7 The BEng Honors of Queen Mary shall be classified based on the BEng Honors weighted average as follows:

(1) First Class >= 70.0

(2) Second Class (Upper Division): 60.0 – 69.9

(3) Second Class (Lower Division): 50.0 – 59.9

(4) Third class: 40.0 – 49.9

5.9.8 学位等级的划分及课程成绩的重审申请：

（1）课程成绩及学位等级划分公布后的十个工作日内，学生可以向考试委员会提出学位等级划分及课程成绩的重审申请，需填写申请表格；重审请求只能在基于程序错误或基于未在适当时间提交特殊情况申请而提出；质疑学术判断而提出的重审申请不予受理；

（2）西北工业大学授课的课程成绩重审表格用中文填写，伦敦玛丽女王大学授课的课程成绩重审表格用英文填写；双方按照自己的程序办理重审申请；

（3）学位等级划分重审表格需用中英文填写，交由两校联合审阅；

（4）在接到重审申请的十个工作日内，受理大学需要向学生及另一方高校提供申请处理结果；重申有可能会延期；

（5）经过重审后，修改成绩的决定由考试委员会主席向两校发出后，成绩方可得到修改。

5.9.8 Request for a review of a module result or for a degree classification:

(1) Students may request a review of a Subject Examination Board decision (for an individual module or for the overall degree classification) within 10 working days of the results being released to students, using a QMES standard form. A request for review can only be on the grounds of procedural error or the grounds that extenuating circumstances have not been made known at the appropriate time for a good reason; there can be no review of academic judgment.

(2) The form must be completed in English for modules taught by Queen Mary and in Chinese for modules taught by NPU. The form will be dealt with by the university teaching the module using its normal procedures.

(3) For reviews of the overall degree classification, the form must be completed in English and Chinese and will be considered jointly by the two universities.

(4) A decision on the review will normally be communicated to the student and the other university within 10 working days of the request being received. This may exceptionally be extended.

(5) If marks have to be changed as a result of the review this will be reported through Chair's Action of the Subject Examination Board to the two universities so that the records can be updated.

5.10 个人信息保护

5.10 Data Protection

西北工业大学依照中国法律管理学生个人信息，伦敦玛丽女王大学依照伦敦个人信息保护法管理学生个人信息。

Personal data held in the UK will be subject to UK Data Protection legislation; personal data held in China will follow normal NPU practice and comply with the relevant Chinese law.

5.11 成绩转换

5.11 Marks conversion

5.11.1 伦敦玛丽女王大学成绩转换为西北工业大学成绩

5.11.1 Conversion from QMUL to NPU marks.

QMUL	NPU	QMUL	NPU	QMUL	NPU	QMUL	NPU
0	0						
1	2	26	39	51	70	76	89
2	3	27	41	52	71	77	89
3	5	28	42	53	72	78	90
4	6	29	44	54	73	79	91
5	8	30	45	55	74	80	91
6	9	31	47	56	75	81	92
7	11	32	48	57	75	82	92
8	12	33	50	58	76	83	93
9	14	34	51	59	77	84	93

QMUL	NPU	QMUL	NPU	QMUL	NPU	QMUL	NPU
10	15	35	53	60	78	85	94
11	17	36	54	61	79	86	94
12	18	37	56	62	79	87	95
13	20	38	57	63	80	88	95
14	21	39	59	64	81	89	96
15	23	40	60	65	82	90	96
16	24	41	61	66	82	91	97
17	26	42	62	67	83	92	97
18	27	43	63	68	84	93	97
19	29	44	64	69	84	94	98
20	30	45	65	70	85	95	98
21	32	46	66	71	86	96	99
22	33	47	67	72	86	97	99
23	35	48	68	73	87	98	99
24	36	49	69	74	88	99	100
25	38	50	69	75	88	100	100

5.11.2 西北工业大学成绩转换为伦敦玛丽女王大学成绩

5.11.2 Conversion from NPU to QMUL marks

NPU	QMUL	NPU	QMUL	NPU	QMUL	NPU	QMUL
0	0						
1	1	26	17	51	34	76	58
2	1	27	18	52	35	77	59
3	2	28	19	53	35	78	60
4	3	29	19	54	36	79	62
5	3	30	20	55	37	80	63
6	4	31	21	56	37	81	64
7	5	32	21	57	38	82	66
8	5	33	22	58	39	83	67
9	6	34	23	59	39	84	69
10	7	35	23	60	40	85	70

NPU	QMUL	NPU	QMUL	NPU	QMUL	NPU	QMUL
11	7	36	24	61	41	86	72
12	8	37	25	62	42	87	73
13	9	38	25	63	43	88	75
14	9	39	26	64	44	89	76
15	10	40	27	65	45	90	78
16	11	41	27	66	46	91	80
17	11	42	28	67	47	92	82
18	12	43	29	68	48	93	84
19	13	44	29	69	50	94	86
20	13	45	30	70	51	95	88
21	14	46	31	71	52	96	90
22	15	47	31	72	53	97	92
23	15	48	32	73	54	98	95
24	16	49	33	74	55	99	97
25	17	50	33	75	57	100	100

5.11.3 Undergraduate mark scheme QMUL

Code	Description
A	Grade A (marks between 70.0 to 100.0)
B	Grade B (marks between 60.00 to 69.9)
C	Grade C (marks between 50.0 to 59.9)
D	Grade D (marks between 45.0 to 49.9)
E	Grade E (marks between 40.0 to 44.9)
F	Fail (marks between 0.0 to 39.9)

5.12 附则

5.12 Supplementary Provisions

5.12.1 本规定由西北工业大学和伦敦玛丽女王大学授权西北工业大学伦敦玛丽女王大学工程学院解释。

5.12.1 Queen Mary University of London Engineering School, NPU authorised by NPU and Queen Mary to reserve the right of interpreting the standards.

5.12.2 本规定自颁布之日起试行

5.12.2 The regulations are put into practice on a trial basis on the day of promulgation.

6 Scholarship Regulations of QMUL Engineering School, NPU

西北工业大学伦敦玛丽女王大学工程学院奖学金管理办法

Scholarship Regulations of QMUL Engineering School, NPU

6.1 总则

6.1 General Guidelines

6.1.1 为推进“总师育人文化”走深走实，强化学生创新实践能力与全球胜任力培养，引导学生成为“专业精、系统强、重实践、能担当”的复合型拔尖创新人才，依据《西北工业大学本科生奖励法》《西北工业大学本科生综合测评办法》《西北工业大学伦敦玛丽女王大学工程学院本科生综合测评实施细则（2024 版）》等文件精神，结合西北工业大学伦敦玛丽女王大学工程学院（以下简称“学院”）实际，特制定本办法。

6.1.1 In order to deepen and implement the "Chief Engineer Education Culture", strengthen students' innovative practical ability and global competence cultivation, and guide students to become "professional, systematic, practical and responsible" compound top-notch innovative talents, the regulations are established based on *NPU Undergraduate Reward Guidelines*, *NPU Undergraduate Comprehensive Quality Assessment Regulations*", *QMES Comprehensive Quality Assessment Regulations* (2024 Edition)" and other related documents under the practical situations in Queen Mary University of London Engineering School, NPU (hereinafter referred to as the School).

6.1.2 奖学金奖励对象为本院在籍本科学生，且所提交材料应为申请人在上一学年以西北工业大学为第一作者单位取得的成果和成绩，以及其他符合评奖条件的成果和成绩。学生可按照学校和学院规定，同时申请学校和学院奖学金。

6.1.2 All undergraduate students are eligible to apply for scholarships. The materials submitted by applicants should include the achievements and accomplishments they have achieved in the previous academic year with NPU as the first author, as well as other achievements and accomplishments that meet the award criteria. Students may apply for both NPU and QMES

scholarships simultaneously, in accordance with the regulations of the university and the school.

6.1.3 学院奖学金的评审工作应遵循公正、公平、公开的原则；参评学生上一学年思想品德测评为合格及以上，无违法、违纪记录，且培养方案内主修课程无不及格现象；学院奖学金结合学生个人表现、学业成绩和综合测评成绩进行综合评定。

6.1.3 The evaluation of the school scholarships shall follow the principles of fairness, equity and openness. Participants should be qualified in terms of morality in the previous academic year, have no records of violations of laws and disciplines, and have no failures in the major modules in the program. The school scholarship shall be comprehensively evaluated based on the students' personal performance, academic performance and comprehensive assessment results.

6.1.4 学院奖学金由西北工业大学与伦敦玛丽女王大学联合设置。学院成立学生奖励评审工作小组，组长由学院院长和党委书记共同担任，副组长由执行副院长、分管学生工作的副书记、分管教学工作的副院长以及英方分管学生和教学工作的理事担任。

6.1.4 Scholarships of the School are co-sponsored by Northwestern Polytechnical University and Queen Mary University of London. The School has established a Scholarship Evaluation Panel to supervise the evaluation work of the scholarships; the Dean and the Secretary of the Party Committee jointly serve as the panel leader; the Executive Vice Dean, the Vice Secretary of the Party Committee responsible for Student Affairs, the Vice Dean responsible for Teaching Affairs and the British director responsible for Student and Teaching Affairs are the vice panel leaders of the Panel.

6.2 奖学金设置

6.2 Scholarships Types

6.2.1 学院奖学金体系涵盖优秀学业奖学金、创新创业能力提升奖学金和全球胜任力提升奖学金三个组成部分。优秀学业奖学金，旨在激励学生刻苦学习，夯实专业基础，不断提升自身学术水平；创新创业能力提升奖学金，鼓励学生参加科研训练项目，培养科学精神和科研能力，提高创新创业素养；全球胜任力提升奖学金，用于支持学生积极参与海外实践活动，着力提升包括跨文化沟通能力在内的全球胜任力。

6.2.1 The school’s scholarship system consists of 3 components: the Academic Excellence Scholarship, the Innovation and Entrepreneurship Enhancement Scholarship, and the Global Competence Enhancement Scholarship. The Academic Excellence Scholarship aims to motivate

students to study diligently, strengthen their professional foundation, and continuously improve their academic level. The Innovation and Entrepreneurship Enhancement Scholarship encourages students to participate in scientific research training programs, cultivate a scientific spirit and research capabilities, and enhance their innovation and entrepreneurship literacy. The Global Competence Enhancement Scholarship supports students' active participation in overseas practical activities and focuses on improving their global competence, including cross-cultural communication skills.

6.2.2 优秀学业奖学金

优秀学业奖学金包括优秀学业特等奖学金、优秀学业一等奖学金、优秀学业二等奖学金和学习进步奖学金。优秀学业奖学金每年 10-11 月评选。

6.2.2 Academic Excellence Scholarship

Academic Excellence Scholarships include the Special, First-Class, Second-Class, and Academic Progress Scholarships. It is awarded annually from October to November.

6.2.2.1 优秀学业特等奖学金

（1）奖金额度：10000 元人民币；

（2）奖励人数：不超过专业总人数的 5%；

（3）评选标准：综合测评成绩在本专业排名前 10%（含 10%），且学业成绩 GPA 在本专业排名前 35%。

6.2.2.1 Academic Excellence Scholarship（Special）

(1) Value: 10,000 RMB;

(2) No. Of Awards: No more than 5% of the total number of students in the whole major;

(3) Eligibility Criteria: The Comprehensive Assessment should be in the top 10% (including 10%) of the major, and the GPA should be in the top 35% of the major.

6.2.2.2 优秀学业一等奖学金

（1）奖金额度：5000 元人民币；

（2）奖励人数：与特等奖获奖人数累计不超过专业总人数的 10%；

（3）评选标准：综合测评成绩在本专业排名前 20% （含 20%），且学业成绩 GPA 在专业排名前 35%。

6.2.2.2 Academic Excellence Scholarship（First-Class）

(1) Value: 5,000 RMB;

(2) No. Of Awards: The total number of Excellence Scholarship and First-Class Scholarship recipients should not exceed 10% of the total number of the whole major;

(3) Eligibility Criteria: The Comprehensive Assessment should be in the top 20% (including 20%) of the major, and the GPA should be in the top 35% of the major.

6.2.2.3 优秀学业二等奖学金

（1）奖金额度：3000 元人民币；

（2）奖励人数：与特等奖和一等奖获奖人数累计不超过专业总人数的 20%；

（3）评选标准：综合测评成绩在本专业排名前 30% （含 30%），且学业成绩 GPA 在专业排名前 35%。

6.2.2.3 Academic Excellence Scholarship（Second-Class）

(1) Value: 3,000 RMB;

(2) No. Of Awards: The total number of Excellence Scholarship, First-Class Scholarship, and Second-Class Scholarship recipients should not exceed 20% of the total number of the whole major;

(3) Eligibility Criteria: The Comprehensive Assessment should be in the top 30% (including 30%) of the major, and the GPA should be in the top 35% of the major.

6.2.2.4 学习进步奖学金

学习进步奖学金用于奖励上一学年学业成绩（教务系统导出的培养方案内的主修课程的 GPA 成绩排名）有显著进步的大三、大四本科生。

6.2.2.4 Academic Progress Scholarship

Academic Progress Scholarship is used to reward junior and senior undergraduates who have made significant progress in their academic performance (the GPA score ranking of major modules in the program derived from the educational administration system) in the previous academic year.

（1）卓越学习进步奖

a. 奖金额度：5000 元人民币；

b. 评选标准：上一学年 GPA 专业排名进步 50 名（含）以上。

(1) Outstanding Academic Progress Scholarship

a. Value: 5,000 RMB;

b. Eligibility Criteria: Students whose GPA improved by more than 50 places in the whole major in the previous academic year;

（2）优秀学习进步奖

a. 奖金额度：3000 元人民币；

b. 评选标准：上一学年 GPA 专业排名进步 30 名（含）以上。

(2) Excellent Academic Progress Scholarship

a. Value: 3,000 RMB;

b. Eligibility Criteria: Students whose GPA improved by more than 30 places in the whole major in the previous academic year.

6.2.3 创新能力提升奖学金

创新能力提升奖学金用于奖励积极参与科技创新及创新创业活动的学生创新创业团队，团队应 3 人以上，负责人以及超过 50%成员须为我院在读学生；团队成员相对稳定，具有半年以上合作经历；需具备科技创新活动、创新创业竞赛、完整商业策划制作等相关经历，并取得一定成果。创新能力提升奖学金包括卓越创新创业团队奖学金和优秀创新创业团队奖学金。创新能力提升奖学金每年 10-11 月评选。

6.2.3 Innovation and Entrepreneurship Enhancement Scholarship

The Innovation and Entrepreneurship Enhancement Scholarship rewards student innovation and entrepreneurship teams that actively participate in technological innovation and entrepreneurial activities. Teams must consist of at least three members, with the team leader and at least 50% of the team members currently enrolled at the school. Team members must be relatively stable, with at least six months of collaborative experience. Teams must also possess relevant experience in technological innovation activities, innovation and entrepreneurship competitions, and comprehensive business planning and production, and demonstrate significant achievements. The Innovation and Entrepreneurship Enhancement Scholarship includes the Excellent Innovation and Entrepreneurship Team Scholarship and the Outstanding Innovation and Entrepreneurship Team Scholarship. It is awarded annually from October to November.

6.2.3.1 优秀创新创业团队奖学金

（1）奖金额度：3000 元人民币；

（2）奖励数量：奖励团队数量不超过每年级学生人数的 5%；

（3）评选标准：创新创业团队应在当年 5 月向学院学生事务办公室备案组建，团队负责人应在本年级提出申请且团队负责人应有实质性成果，如：当年主持校级以上大学生创新创业训练项目（或“高峰领航计划”），或者获得学科竞赛或双创竞赛校级以上奖励，不得临时拼凑团队及成果，否则不予评定。

6.2.3.1 Excellent Innovation and Entrepreneurship Team Scholarship

(1) Value: 3,000 RMB;

(2) No. Of Awards: The number of awarding teams is supposed to be within 5% of the number of students in each grade in the School;

(3) Eligibility Criteria:

The Excellent Innovation and Entrepreneurship Team should be registered with the Student Affairs Office of the School in May of that year. The team leader should apply in the current grade and have substantial achievements, such as hosting the innovation and entrepreneurship training program (or "Peak Pilot Program") above the school level that year or obtaining an award above the school level in the Subject Contest or Innovation and Entrepreneurship Competition. Temporary formation of teams and achievements is not allowed, otherwise they will not be evaluated.

6.2.3.2 卓越创新创业团队奖学金

（1）奖金额度：10000 元人民币；

（2）奖励数量：卓越创新创业团队从优秀创新创业团队中产生，奖励团队数量不超过每年级学生人数的 1%；

（3）评选标准：以中国国际大学生创新大赛、“挑战杯”全国大学生课外学术科技作品竞赛和“挑战杯”中国大学生创业计划竞赛成果为评选依据。申请团队负责人须以第一完成人获得中国国际大学生创新大赛高教主赛道、“青年红色筑梦之旅”赛道、产业命题赛道省级金奖以上或国际项目银奖以上，或者获得“挑战杯”全国大学生课外学术科技作品竞赛和“挑战杯”中国大学生创业计划竞赛省级金奖以上奖励。同一项目或核心技术（产品）相同的同类项目在不同比赛中获奖的，其成果需合并申报或者只认定最高奖项，申请者不得拆分成果多次申报。获奖证书中人名重合率超过（含）3 人次的应在同一个团队申报。

6.2.3.2 Outstanding Innovation and Entrepreneurship Team Scholarship

(1) Value: 10,000 RMB;

(2) No. of awards: Outstanding Innovation and Entrepreneurship teams are selected from the Excellent innovation and entrepreneurship teams. The number of awarding teams should not exceed 1% of the number of students in each grade;

(3) Eligibility Criteria: The selection shall be based on the results of the China International College Student Innovation Competition, the "Challenge Cup" National College Student Extracurricular Academic and Scientific Works Competition and the "Challenge Cup" China

College Student Entrepreneurship Plan Competition. The applicant team leader shall be the first person to win the provincial gold medal or silver medal in an international project or above in the China International College Student Innovation Competition Higher Education Main Track，"Youth Red Dreaming Journey" track, and industry proposition track. Or won the provincial gold medal or above in the "Challenge Cup" National College Student Extracurricular Academic and Scientific Works Competition and the "Challenge Cup" China College Student Entrepreneurship Plan Competition. If the same projects or similar projects with the same core technology (product) win awards in different competitions, their results must be declared jointly or only the highest award will be recognized. Applicants are not allowed to split the results and apply for multiple times. Those whose names overlap more than (including) 3 times in the award certificates should apply in the same team.

6.2.4 全球胜任力提升奖学金

全球胜任力提升奖学金包括语言能力提升奖学金、海外实习实践奖学金和世界名校深造奖学金。

6.2.4 Global Competency Enhancement Scholarships

The Global Competency Enhancement Scholarships include Language Proficiency Improvement Scholarship, Overseas Internship and Practice Scholarship, and Advanced Studies Scholarship for World-Famous Universities.

6.2.4.1 语言能力提升专项奖学金

语言能力提升专项奖学金用于奖励在雅思、托福等国际性语言标准化水平考试中获得优异成绩的本院在校本科生。语言能力提升奖学金每年 10-11 月评选，每名本科生在校期间仅可获得一次。

6.2.4.1 Language Proficiency Improvement Scholarship

This Scholarship is used to reward the undergraduates of the School who have achieved excellent results in international standardized language proficiency tests such as IELTS and TOEFL. It is awarded every year from October to November, and each undergraduate student can only receive it once during their studies.

（1）奖励额度：根据语言成绩分为 8000、5000、3000、和 2000 元 4 个等级；

（2）评选标准：

雅思考试总分达 8（含）以上，且单项均在 6.5 分（含）以上者可获得奖学金 8000 元；

雅思考试总分达 7.5（含）以上，且单项均在 6.5 分（含）以上者可获得奖学金 5000 元；

雅思考试总分达 7（含）以上，且单项均在 6.0 分（含）以上者可获得奖学金 3000 元；

雅思考试总分达 6.5（含）以上，且单项均在 6.0 分（含）以上者可获得奖学金 2000 元；

托福考试总分达 100 分（含）以上者可获得 2000 元奖金。

其他语言考试奖励金额和评定标准以学生奖励评审工作小组评定为准考试类型为依据进行调整。

(1) Value: According to different scores, it is divided into 4 grades of RMB 8,000, 5,000, 3,000 and 2,000.

(2) Eligibility Criteria:

Those who have a total score of 8 (inclusive) in the IELTS test and a score of 6.5 (inclusive) in each item will receive a scholarship of 8,000 RMB;

Those who have a total score of 7.5 (inclusive) in the IELTS test and a score of 6.5 (inclusive) in each item will receive a scholarship of 5,000 RMB;

Those who have a total score of 7 (inclusive) in the IELTS test and a score of 6.0 (inclusive) in each item will receive a scholarship of 3,000 RMB;

Those who have a total score of 6.5 (inclusive) in the IELTS test and a score of 6.0 (inclusive) in each item will receive a scholarship of 2,000 RMB;

Those with a TOEFL total score of 100 or above will receive a scholarship of 2,000 RMB.

Award amounts for other exams will be adjusted based on the exam type as determined by the Scholarship Evaluation Panel.

6.2.4.2 海外实习实践奖学金

本科在校期间，每名学生每个自然年内可获得一次海外实习实践奖学金。海外实习实践奖学金每学期评选一次。

6.2.4.2 Overseas Internship and Practice Scholarship

The overseas internship and practice scholarship is awarded once every semester. Each student can receive it once per year.

（1）奖励范围

a. 顺利完成学校、学院组织的赴伦敦玛丽女王大学等海外名校寒暑期研学项目，并取得学校国际合作处资助的学生；

b. 参与国际课程、国际项目以及国际组织实习实践等全球胜任力提升项目，并取得学校

国际合作处资助的学生。

c. 赴国（境）外参加高水平学术会议、国际学术竞赛、高水平国际文体比赛并取得学校资助的学生。认定办法参照《西北工业大学本科生赴国（境）外交流资助管理办法（校外字〔2023〕156 号）》。

（2）奖金额度

a. 欧美、大洋洲、非洲地区不超过 10000 元/人；

b. 亚洲地区不超过 5000 元/人。

实际产生费用低于学校和学院最高发放金额之和的情况，按照实报实销进行发放。报销范围包含项目费、住宿费、往返交通费和护签费。

(1) Award Scope:

a. Students who have successfully completed the winter and summer overseas programs organized by the school and the university, such as Queen Mary University of London Summer School, and obtained funding from NPU International Cooperation Office;

b. Students who participate in global competency enhancement programs such as international courses, international projects, and internships in international organizations, and receive funding from NPU International Cooperation Office.

c. Students who have participated in high-level academic conferences, international academic competitions, or high-level international cultural and sports competitions abroad and have received NPU’s funding. The recognition method is based on the "Regulations on the Management of Funding for Undergraduate Students Going Abroad for Exchanges at Northwestern Polytechnical University (Xiaowai Zi [2023] No. 156)".

(2) Value:

a. Europe, America, Oceania and African countries: no more than 10,000 RMB per student;

b. Asian countries: no more than 5,000 RMB per student.

If the actual expenses incurred are lower than the sum of the maximum award amount from the school and the university, the award will be paid on a reimbursement basis. Reimbursement covers program fees, accommodation, round-trip transportation, and visa application fees.

6.2.4.3 世界名校深造奖学金

世界名校深造奖学金用于奖励赴世界名校（包含西北工业大学与伦敦玛丽女王大学）继续深造的学院本科应届毕业生。世界名校深造奖学金每年 10-11 月评选。

6.2.4.3 Advanced Studies Scholarship for World-Famous Universities

This Scholarship is used to reward the fresh undergraduate graduates of the School to continue their studies in world-famous universities (.including NPU and QMUL). It is awarded annually from October to November.

（1）奖金额度：10000 元人民币；

（2）评选标准

a. 获得四大世界大学排名（QS 世界大学排名、USNEWS 世界大学排名、泰晤士高等教育世界大学排名、ARWU 世界大学学术排名）前 10 院校的研究生录取通知书，并按期注册入读的学院本科应届毕业生。世界大学排名以获得录取通知书时的最新排名为准（如 2025 届参考官方 2025 年排名）；

b. 获得一等学位，且获得西北工业大学或伦敦玛丽女王大学研究生录取通知书，并实际注册入读西北工业大学或伦敦玛丽女王大学的应届本科毕业生。

(1) Value: 10,000 RMB;

(2) Eligibility Criteria:

a. Fresh undergraduate graduates who have received a postgraduate admission letter from a top 10 university in the four major world university rankings (QS World University Rankings, USNEWS World University Rankings, Times Higher Education World University Rankings, ARWU Academic Ranking of World Universities), and have registered on schedule. The World University Rankings are based on the latest ranking at the stage of receiving the admission letter.(e.g., for the class of 2025, refer to the official 2025 rankings);

b. Fresh undergraduate graduates must have graduated from QMES with a first-class degree and have received a postgraduate admission letter from NPU and QMUL, and registered on schedule.

6.3 附则

6.3 Supplementary Provisions

6.3.1 凡违反《西北工业大学学生违纪处分管理办法》相关规定者，在处分影响期内，取消其评选资格。涉嫌学术不端者将按照国家和学校有关规定进行处理，并取消评选资格。

6.3.1 Anyone who violates the relevant provisions of the *Regulations on Disciplinary Punishment for Students of Northwestern Polytechnical University* will be disqualified from the

selection process during the disciplinary period. Those suspected of academic misconduct will be dealt with in accordance with relevant national and university regulations and will be disqualified from the selection process.

6.3.2 学院学生事务中心根据本办法制定当年评选工作具体实施办法和工作细则。

6.3.2 The Student Affairs Office of the School is responsible for making the specific details of how the School scholarships are evaluated in that year based on the regulations.

6.3.3 本办法由学院学生奖励评审工作小组负责解释。

6.3.3 The School Scholarship Evaluation Panel reserves the right of interpreting the regulations.

6.3.4 本办法自颁布之日起施行。原《西北工业大学伦敦玛丽女王大学工程学院奖学金管理办法（试行）》（西玛丽字）[2023]1 号同时废止。

6.3.4 The regulations shall come into effect as of the date of promulgation. The original *Scholarship Regulations of QMUL Engineering School, NPU（Trail)(XMari[2023]No.1)* shall be repealed simultaneously.

阅 读 反 馈

本手册汇集西工大伦敦玛丽女王大学工程学院对本科生教育、管理、服务的有关规定和要求，内容包括学院简介、培养方案、自我管理、考试管理规定、学业管理规定、奖学金设置、生活服务指南等。本手册是你了解大学生活的窗口，顺利完成学业的目标，完善自身素质的领航，规划成长之路的指南。因此，作为一项基本要求，请你认真阅读本手册的全部内容，深刻领会本手册的要求，并在大学四年的成才实践中随时对照。作为学习考核的一种方式，请你在通读本手册后，在下面签署你的姓名、学号和班级，并将本页“阅读反馈”在规定的时间内上交给辅导员老师，由学院汇总并存档。

如无异议，请签字确认！

姓名：

学号：

班级：

Feedback

This Student Handbook of QMUL Engineering School, NPU integrates relevant provisions of the undergraduate education, management and service, including the school introduction, programmes, personal administration, assessment regulations, academic regulations, scholarships and life service guide. The handbook, a window on your college life, can help you to complete your college studies, improve your professional learning ability and plan your career. As a basic requirement, please carefully read all the contents of this handbook, and understand the requirements of this handbook in the four years of the University. As a way of learning evaluation, please read this handbook, sign your name, student number and class below and hand it to your counselor.

If there is no objection, please sign for confirmation.

Name：

Student Number：

Class: