

Publications Registration Number

UNIST-Educational Affairs Team-2024-007

2024 Fall

**Graduate Program
Handbook**

Educational Affairs Team

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I

UNIST Honer Code UNIST 명예규율

1. The members of UNIST will behave conscientiously all academic procedures.
1. The members of UNIST will not cause harm or damage to others.
1. The members of UNIST will not violate the law in all the procedures required for learning, teaching and researching, and in providing service.
1. The members of UNIST will respect each other and all members of the community.
1. The members of UNIST will be honest and diligent in academic and social lives.

II

Academic Calender 2024 학사력

Schedule		Details	
2024 Spring Semester	2	26(Mon)	The First Day of the Spring Semester 2024
		26(Mon) ~ 29(Thu)	Course Changes and Confirmation Spring Application for Graduation & Early Graduation
	3	1(Fri)	Holiday – Independence Movement Day
		22(Fri)	End of the First Quarter of the Semester Course Drop Deadline
	4	10(Wed)	The Korean National Assembly Election
		15(Mon) ~ 19(Fri)	Mid-term Exams
		19(Fri)	End of the Second Quarter of the Semester Leave of Absence Application Deadline(General)
	5	5(Sun)	Holiday - Children's Day
		6(Mon)	Holiday - Children's Day(Observed)
		7(Tue) ~ 10(Fri)	Application for Return from Absence(Summer Session)
		15(Wed)	Holiday – Buddha's Birthday
		17(Fri)	End of the Third quarter of the Semester [G]Deadline for Thesis Committee Nomination
		20(Mon) ~ 24(Fri)	[UG]Fall 2024 Major Application & Change Period
		23(Thu) ~ 24(Fri)	Course Registration for the Summer Session
	6	6(Thu)	Holiday - Memorial Day
		10(Mon) ~ 14(Fri)	Final Exams
		14(Fri)	The End of Spring Semester
		15(Sat) ~ 9.1.(Sun)	Summer Vacation
		17(Mon) ~ 7.26(Fri)	Summer Session
		24(Mon) ~ 7.5(Fri)	[G]Application for Fall 2024 Program Change
	7	1(Mon)	Confirmation of Spring 2024 Grading
		1(Mon) ~ 12(Fri)	Application for Fall 2024 Leave of Absence/Return(1st)
	8	1(Thu) ~ 2(Fri)	Course Registration for Fall 2024 Semester
		5(Mon)	Confirmation of Summer 2023 Grading
		5(Mon) ~ 16(Fri)	Application for 2024 Fall Leave of Absence/Return(2nd)
		15(Thu)	Holiday - National Liberation Day
		16(Fri)	Conferral of Degrees(Spring 2024)
		20(Tue) ~ 22(Thu)	Tuition Fee Payment(Fall 2024)

Schedule		Details	
2 0 2 4 Fall Sem ester	9	2(Mon)	The First Day of the Fall Semester 2024
		2(Mon) ~ 6(Fri)	Course Changes and Confirmation Fall Application for Graduation & Early Graduation
		16(Mon) ~ 18(Wed)	Holiday - Chuseok(Korean Thanksgiving Day)
		27(Fri)	End of First Quarter of the Semester Course Drop Deadline
		28(Sat)	Holiday - UNIST Foundation Day
	10	3(Thu)	Holiday - National Foundation Day
		9(Wed)	Holiday - Hanguk Proclamation Day
		21(Mon) ~ 25(Fri)	Mid-term Exams
		25(Fri)	End of the Second Quarter of the Semester Leave of Absence Application Deadline(General)
	11	11(Mon) ~ 15(Fri)	Application for Return from Absence(Winter Session)
		22(Fri)	End of the Third Quarter of the Semester [G]Deadline for Thesis Committee Nomination
		25(Mon) ~ 29(Fri)	[UG] Major Application & Change Period
		28(Thu) ~ 29(Fri)	Course Registration for the Winter Session
	12	16(Mon) ~ 20(Fri)	Final Exams
		20(Fri)	The End of Fall Semester
		21(Sat) ~ 2025.3.3.(Mon)	Winter Vacation
		23(Mon) ~ 2025.1.31.(Fri)	Winter Session
		25(Wed)	Holiday - Christmas
		30(Mon) ~ 2025.1.10.(Fri)	[G]Application for Spring 2025 Program Change
	2025 1	1(Mon)	Holiday – New Year’s Day
		6(Mon)	Confirmation of Fall 2024 Grading
		6(Mon) ~ 17(Fri)	Application for Spring 2025 Leave of Absence/Return(1st)
		28(Tue) ~ 30(Thu)	Holiday – Lunar New Year’s Day
	2	6(Thu) ~ 7(Fri)	Course Registration for Spring 2025 Semester
		10(Mon)	Due Date for Winter Session Grading
		10(Mon) ~ 21(Fri)	Application for Spring 2025 Leave of Absence/Return(2nd)
		20(Thu)	Conferral of degrees(Fall 2024) Commencement Ceremony
		21(Fri)	2025 Undergraduate Matriculation Ceremony
25(Tue) ~ 27(Thu)		Tuition Fee Payment(Spring 2025)	

Ⅲ

General Academic Policies 학사일반

1. Program Period 과정연한

 Class Period 수업연한

- The period required for graduation or course completion
 - Master's Program: 2 years (4 semesters)
 - Doctoral Program: 4 years (8 semesters)
 - Combined Master's-Doctoral Program: 6 years (12 semesters)

 Shortest Period of Study 최단수업기간

- The shortest period required for graduation or course completion
 - Master's Program & Doctoral Program: two or more semesters
 - Combined Master's-Doctoral Program: a full-time classes of four semesters or more

 Attendance Period 재학연한

- The maximum period that is allowed for students to enrolled
 - Master's Program: 3 years (6 semesters)
 - Doctoral Program: 6 years (12 semesters)
 - Combined Master's-Doctoral Program: 7 years (14 semesters)
- ※ The period of leave of absence shall not be counted in the attendance period. 휴학 기간은 재학연한에 산입하지 않음
- ※ The attendance period may be extended for 1 year after review by the Academic Affairs Operation Committee
재학기간 연장이 필요한 경우에는 학사운영위원회의 심의를 거쳐 1회에 한정하여 재학기간을 1년 연장할 수 있음(학칙 제69조4항)
- ※ A person who fails to obtain the degree after the length of enrollment has expired shall be expelled.
재학연한 만료 시까지 본인의 학위과정 미이수 시 제적

2. Academic Leave/Return 휴·복학

Academic Leave of Absence 휴학

- Reason for academic leave:
 - Military service
 - General reasons: family affairs, illness or other unavoidable reasons
휴학사유: 군입대, 질병, 그 밖의 부득이한 사유로 인한 일반 휴학
- Students are not allowed to take a general leave of absence in the first semester after admission except military service, pregnancy, childbirth or illness can be exceptional.
질병, 임신, 출산 또는 입대 및 제외된 입학 후 첫 1학기 휴학 불가
- General leave of absence may be extended up to 2 semesters on a semester basis, and shall not exceed 4 semesters in total during the period of attendance.
일반휴학은 학기 단위로 1회 최대 2학기까지 신청 가능
재학기간 중 통산 4개 학기까지 휴학할 수 있음
- If there are unavoidable reasons, the President may authorize additional leave of absence as below.
부득이한 사유가 있을 시 아래와 같이 총장이 추가 휴학을 허가할 수 있음

Unavoidable reasons	Period
pregnancy 임신	within 1 semester 1개 학기 이내
childbirth 출산	within 1 semester 1개 학기 이내
childcare 육아	within 6 semesters 6개 학기 이내
Business Start-up 창업	within 8 semesters, but beyond that, up to the semesters approved by the President. 8개 학기 이내, 단 이후는 총장이 허가한 학기까지
Illness 질병	By the time of disease improvement 질병 호전시까지
Others 기타	

- Academic leave of absence shall not be allowed to technical research personnel. (Inquiry: Student Affairs Team)
전문연구요원의 경우, 원칙적으로 휴학 불가능함 (문의: 학생팀)

Academic Leave for/Return from Military Service 군휴학·군복학

- Student shall apply for academic leave of absence for military service to extend the previous leave of absence for enlistment. Student should attach copy of the notice of enlistment or military service confirmation. The student will be expelled after the designated period of academic leave ends.
휴학 중인 학생이 군입대로 인해 휴학기간 연장 시 입영통지서 사본 또는 군복무 확인서 첨부하여 반드시 군휴학을 신청하여야 함. 그렇지 않을 경우 기존 휴학기간 종료 후 제적 조치

2. Academic Leave/Return 휴·복학

□ Application Period 신청시기

- Students can apply for their academic leave/return during the designated application period notified in the academic calendar. However, students who are discharged from military service within the first quarter of the semester can apply for their academic return in designated period of academic return schedule notified in the academic calendar.

학사력에 따른 신청 기간에 휴·복학 신청 가능.

단, 군 제대일자가 수업일수 1/4 이내일 경우 정해진 기간 내에 복학 신청 가능

- Student shall apply for academic leave until the second quarter of a semester. In this case, tuition will be carried over to the next semester.

(Student shall apply for sick leave at least 1 week before the final exam period.)

일반휴학은 수업일수 1/2선까지 신청 가능하며, 등록금은 다음 학기로 이월됨 (질병휴학은 기말고사 전 주까지 신청 가능)

- Any cancellation of leave of absence after the approval period from advising professor and department(school) head is avoided.

지도교수 및 학과(부)장 승인가간 이후 미승인된 휴학 건에 대해서는 학생의 학적 관리 및 고등교육통계 보고 등으로 인해 지체없이 승인이 필요하며, 승인 기간 이후 학생 임의의 휴학 취소는 지양함.

□ Procedure 절차

▶ Online Application 온라인 신청

- Apply for the application at the portal site (<http://portal.unist.ac.kr>) during the designated period.

지정된 기간 내 포털에서 신청

- Log into the portal site > Student Registry > Status Change > Application for Academic leave/return

(Approval by the advisor will be processed on the Portal Site)

포털 로그인 > 학적 > 학적변동 > 휴·복학신청 (포털 상 지도교수 승인)

▶ Walk-in Application 방문 신청

- In case of academic leave for sick/illness, pregnancy·childbirth, child-care students have to fill out a 'Request for Academic Leave of Absence' and submit the request form with proof documents to the school office.

질병휴학, 임신/출산 휴학, 육아휴학의 경우, 휴학원 작성 및 증빙서류 구비 후 소속 교학팀 제출

2. Academic Leave/Return 휴·복학

□ Required Documents 필요서류

- Academic leave of absence due to illness:
A medical certificate from a national or public general hospital or a specialist
질병 휴학: 국·공립 종합병원 또는 병의원 전문의 진단서
- Academic leave of academic for military service:
Copy of the notice of enlistment or military service confirmation
군 휴학: 입영통지서 사본 또는 군복무확인서
- Returning to the school from military leave:
A certificate of discharge or an abstract of resident registration (with details of military service recorded)
군 복학: 전역증 사본 혹은 주민등록 초본(병역사항 기재된 것) 첨부

□ Note 비고

- When applying for academic leave, student do not have overdue fees and return all books checked out.
모든 도서관 대출 도서가 반납되고 연체료가 없는 상태에서 휴학 신청 가능
- Students may return their scholarship
장학금 반납이 필요할 수 있음
- Students who have been returning home during military leave must cancel their military leave and submit documents for proof of return within 7 days without delay and change to general leave of absence.
군휴학 중 귀가/귀향 조치된 학생은 지체 없이 최대 7일 이내 군휴학 취소 및 귀가/귀향 증명 서류 제출(소속 교학팀 및 학부 행정실) 및 일반 휴학으로 변경 필요
- Students should return to school within application period for returning school for the semester when the leave of absence period has expired. Students who did not return to school during the period shall be expelled. Therefore, students are required to apply for returning school procedure or take an additional leave of absence, within the remaining general leave quota.
복학 시기는 휴학기간이 만료된 학기의 복학 신청 기간까지이며, 이 기간에 복학을 하지 않은 자는 미복학 제적 처리 되므로, 반드시 복학신청이나 잔여 휴학 쿼터 안에서 휴학 연장 신청을 해야함.

3. Selection and Change of Major 전공결정 및 변경

Selection of Major 전공결정

- All students in their first semester should decide their major, advisor and conduct a pledge of ethical research through portal
 - ▶ Portal → Academic Affairs → Student Registry → Student Info. → Advisor Appointment

모든 학생은 첫 학기에 전공 및 지도교수 결정, 윤리서약을 진행하여야 함

Change of Major 전공변경

- It is possible for students to change his/her major with the president's permission. 총장의 허가를 받아 전공변경 가능
 - ▶ Required documents 필요서류
 - Application for Change of Major : Advisor's opinion and approvals of advisors and department heads (before/after) should be included

전공변경신청서(지도교수 의견 및 변경 전/후 지도교수 및 학과(부)장 승인)

※ Please refer to P.12 to find information in detail for change of major

전공변경 세부내용: P.12 참조

4. Credit Transfer 학점인정

□ Credit Transfer 학점인정

- After voluntary withdrawal from UNIST or other accredited graduate schools and entered UNIST graduate program (same study program), student can transfer credits taken from the previous graduate school when they correspond with the courses in the UNIST curriculum.

본원 또는 타 대학 동일 학위과정 제적 후 해당 대학에서 취득한 학점은 UNIST 교육 과정에 상응할 경우 인정

- Only available for one half of the total course credits from other graduates schools can be recognized.

본원 또는 타 대학에서 취득한 각 과정 및 전공별 수료 교과학점의 2분의 1만 인정

- When students apply for the credit transfer, approval from their advisors and department heads should be given.

학점인정 신청 시, 지도교수 및 학과(부)장의 승인이 필요

- Credits obtained from UNIST are recognized and marked as they are and included in the GPA calculation.

본원에서 취득한 학점은 이수한 학점 및 성적을 그대로 인정, 표기하며 GPA 계산 시 포함

- Credits obtained from other graduate schools are recognized as credits for alternative recognized courses in the UNIST and are excluded when calculating GPA.

타 대학원에서 취득한 학점은 본원 대체인정과목 학점으로 인정하며 GPA 계산 시 제외

▶ Required documents: 필요서류

- Credit Transfer Application Form 학점인정신청서
- Academic transcripts from the previous graduate school
이전 대학원 성적증명서
- Syllabus 강의계획서
- Proof of voluntary withdrawal 제적 증빙서류

5. Credit Carryover 학점이월

□ Credit Carryover 학점이월

- 1) Any excess of credits required for graduation from undergraduate courses and Master's courses with regard to credits acquired from attendance of graduate courses in UNIST

본원 학사과정 및 석사과정에서 취득한 대학원과정 과목 중 졸업에 소요되는 학점을 초과한 학점

- 2) Course credits of graduate schools can be accumulated and recognized as the number of credits required for completion from the doctoral course out of the total credits acquired after completing the master's course opened in the graduate program of UNIST.

본원 석사과정에서 취득한 교과학점을 박사 학위과정 교과학점으로 누적 인정 가능

- all or some of the total credits from UNIST can be recognized. (only available for course credits)

본원에서 취득한 학점의 전부 또는 일부를 인정 (교과학점만 인정)

- When students sign up for the credit carryover, approval from their advisors and department(School) heads should be given.

학점이월 신청 시, 지도교수 및 학과(부)장의 승인이 필요

- Once credit is carried over, credits and grades earned during the previous degree will be notified in the transcript. And the records shall be included from the calculation of the total average GPA of each course.

학점이월이 승인된 교과목은 울산과학기술원의 각 과정에서 이수한 학점 및 성적을 그대로 인정 표기하며, 각 과정의 전체 평점 평균 계산시 포함

▶ Required documents: 필요서류

- Credit Carryover Application Form 학점이월신청서
- Academic transcripts 성적증명서 (하위과정 학점이수표)

6. Transition of Degree Program 학위과정 변경

1. Change of Degree Program 과정변경

- 1) Change of program means a change from the master's program to the combined master's and doctoral program.

과정변경: 석사과정 → 석박통합과정으로의 변경을 의미함

- 2) Students must acquire more than 16 credits and have a GPA of 3.7 or higher to apply for change of degree program. Students who is in class period of master's program(~4th semester) can apply it.

석사과정 수업연한(4학기) 이내인 학생이 16학점 이상 이수하고 평점평균이 3.7 이상인 경우 과정변경 신청 가능함

2. Dropping of Degree Program 중도포기

- 1) Dropping of degree program means a change from the combined master's and doctoral program to the master's program.

중도포기: 석박통합과정 → 석사과정으로의 변경을 의미함

- 2) If a student attending the combined program ceases to study in the middle of the program after exceeding the duration limit of three years for a master's course, the student shall be expelled from the university if he or she fails to graduate within one semester after changing to a master's program.

석사 재학연한인 3년을 초과한 통합과정 학생이 석사과정으로 중도포기하는 경우 석사과정 변경 후 한 학기 내에 졸업하지 못하면 제적 처리됨

- 3) If a student attends the combined program after changing from the master's program as of the first semester in 2012, but completes the combined program with a master's degree, any additional scholarship the student received under the doctoral program may be redeemed from the student.

2012학년도 1학기 과정변경자부터 통합과정에 재학 중인 자가 석사학위를 수여하고 통합과정을 마칠 경우 박사과정생 적용을 통해 수령한 추가 장학금은 환수할 수 있음

□ Procedures 신청절차

- Change and Dropping of Degree Program 과정변경 또는 중도포기
 - Procedure: Fill out an application form → Get an approval of academic advisor and head of the department → Submit the form to the Academic and Student Affairs Team office
 - 지도교수, 학과(부)장 승인 후 소속 교학팀에 서류 제출
 - Form: Application for Change of Degree Program, Application for Dropping of Degree Program 과정변경신청서, 중도포기신청서
- Application period: Refer to Academic Calendar 학사력 내 신청기간

6. Transition of Degree Program 학위과정 변경

3. Change of Major 전공변경

- 1) Change of major means a change from one department to another department or from one major to another major within a graduate degree.

전공변경: 대학원과정생의 학위과정 내에서 학과(부) 또는 세부전공을 변경함

- 2) Students should submit an application for change of major to the head of the department. The student is changing to with the approval of the head of the department which the student is belonging to.

전공변경 신청 시 현 소속 학과(전공) 지도교수 및 학과(부)장 승인 후 변경하고자 하는 소속 학과(전공) 지도교수 및 학과(부)장 승인이 필요함

□ Procedures 신청절차

- Change of Major 전공변경
 - Procedure: Fill out an application form → Get an approval of academic advisor and department head in both department of current and expected to be changed → Submit the form to the Academic and Student Affairs Team office
 - 현 소속 지도교수, 학과(부)장 및 변경소속 지도교수, 학과(부)장 승인 후 소속 교학팀에 서류 제출
 - Form: Application for change of major 전공변경신청서
- Application period: Refer to Academic Calendar 학사력 내 신청기간

□ Notes 안내사항

- Procedure for change of degree program, dropping of degree program and change of major can be changed depending on the capacity of graduate course and departments' specific situations.

과정변경, 중도포기, 전공변경에 대해 추후 대학원과정 정원 및 학과별 상황에 따라 절차 변경 가능

- The deadline for each graduation requirements for students who changed their degree program, major or dropped degree is in accordance with the Regulations on the degree conferment and graduation requirements in each department or school.

과정변경, 전공변경, 중도포기 후의 졸업요건 충족(연구계획서 제출, 박사자격시험 등)에 대한 내용은 학위수여규정 및 학과별 요건에 따름

7. Tuition Fee for Excess Semester 초과학기 등록금

□ Tuition Fee for Excess Semester depending on Required Credits

졸업 필요 학점에 따른 초과학기 등록금

- Students who enroll in excess of the years required for graduation from a school should pay a tuition fee depending on his/her remaining required credits for graduation.

초과학기 등록생은 졸업에 필요한 잔여학점에 따라 등록금을 납부하여야 함

Required Credits for graduation 졸업에 필요한 잔여학점	Tuition Fee 등록금
0 Credits	1/5
1~3 Credits	1/2
over 4 Credits	All

- * Required credits contain course and research credits both.

졸업에 필요한 잔여학점은 교과 및 연구학점을 모두 포함함

IV

Class 수업

Class 수업

Academic Year 학년

- Regular semesters: Spring and Fall for 16 weeks each
정규학기: 1, 2학기 각 16주
- Seasonal sessions: Summer and Winter for 4~6 weeks each
계절학기: 여름 및 겨울계절학기 각 4~6주

Attendance 출결

- Students shall attend at least 3/4 of the total class hours for each course to have the grade be recognized
수업의 3/4 이상 출석 시 성적인정
- If a student wishes to be granted attendance due to unavoidable reasons, the student may submit the attendance acknowledgement to the faculty in charge of the course to have attendance recognized.
부득이한 사유로 출석 인정받고자 하는 경우, 출석인정원을 교과목 담당교수에게 제출하여 출석 인정 가능

Repeating a Course 재수강

- All Students can retake a course. Course retaking is only allowed once per course and the maximum achievable grade is B+
재수강 제한은 없으나 한 과정당 한 번만 허용되며 최대 등급은 B+입니다
- When course repeating occurs, the previous grade should be deleted and the new grade remains with the mark "R" before its course classification. 재수강 시 이전 성적은 삭제되고, 새로운 성적 앞에 "R" 표기

V

Grading 성적

Grading 성적

□ **Standards for Grading 성적 기준**

- Instructors evaluate students' academic performance in accordance with the grading standards specified on the syllabus of their courses.
교수는 강의계획서 상 명시된 성적 기준에 따라 학업 성취를 평가
- If a student attends less than 3/4 of the classes, his/her grade will be 'F'.
수업의 3/4 미만으로 출석 시 F 학점 부여
- Scores are calculated based on mid-term exams, final exams, assignments, quizzes, attitude, attendance, presentations, etc.
(Methods of evaluating grades may vary according to the course instructor)
성적은 중간고사, 기말고사, 과제, 퀴즈, 태도, 출석, 발표 등을 기초로 부여
성적 평가 방법은 교수에 따라 다양

□ **Grading System 성적 체계**

- Lecture courses and combined courses (lecture & experiment) are evaluated with a letter grade. Courses for which instructors have difficulty giving exact grades, such as for seminars, master's research, doctoral research etc., can be evaluated with S (successful) or U(unsuccessful)
이론강의 및 강의와 실험을 병행한 교과학점 과목의 성적은 letter grade로 평가하며, 세미나, 논문연구와 같이 정확한 등급을 부여하기 곤란한 과목의 경우에는 S 또는 U로 평가
- Grades over D- and S are recognized as acquired credits. Details of the grading system are as follows
D- 이상과 S를 취득학점으로 인정

Grades	A+	A ^o	A-	B+	B ^o	B-	C+	C ^o	C-	D+	D ^o	D-	F	S	U
Point	4.3	4.0	3.7	3.3	3.0	2.7	2.3	2.0	1.7	1.3	1.0	0.7	0.0	Not Calculated	Not Calculated

- GPA is defined as follows:

$$GPA = \frac{\sum(\text{Each grade point} \times \text{Credits})}{\text{Applied credits}}$$

·GPA should be calculated to two decimal places.

Grading 성적

Grade browsing 성적 열람

- Students can check their grade for each semester and their cumulative GPA at the portal site(<http://portal.unist.ac.kr>). Please click the menu of Grade and then go to Grade browsing section of this semester for more details.

포털에서 학기별 성적 및 GPA 조회 가능 (성적메뉴 > 성적 조회메뉴)

- When a student does not participate in course evaluation, he/she is not allowed to browse the grades. (Exception: seminar, master's research, doctoral research)

강의평가 미 이행 시, 성적 열람 불가 (예외: 세미나, 석·박사 논문연구)

Grade correction 성적 정정

- Students can see their grades during the correction period right after the end of the term. If a student has an objection about the grades he/she can request a grade correction to his/her instructor.

학기 종료 후 성적 정정기간에 성적 확인하여 이의가 있을 경우 교수에게 정정 요청 가능

Academic Warning 학사 경고

- Students who received a GPA lower than 3.0 will receive an academic warning.

매 학기 평점평균 3.0 미달 시 학사경고

- If a student receives an academic warning three times in total, he/she will be expelled. (impossible for readmission)

학사경고 통산 3회 시 제적 (재입학 불가)

VI

Degree Conferment 학위수여

1. Degree Requirements 학위수여요건

Category	Requirements	Master's Program	Doctoral Program	Combined Master's-Doctoral Program
Requirement for Course Completion	Total Credits	at least 28	at least 60	at least 60
	Course Credits	at least 15	at least 12	at least 21
	Research Credits	at least 4	at least 14	at least 18
	GPA	3.0(B0)	3.0(B0)	3.0(B0)
	Qualifying Exam	-	Implemented in accordance with the guidelines presented by each school within 3 years.	
	Program Duration	<ul style="list-style-type: none"> ■ minimum: 2years (can be reduced by 1 year) ■ maximum: 3years 	<ul style="list-style-type: none"> ■ minimum: 4years (can be reduced by 3 years) ■ maximum: 6years 	<ul style="list-style-type: none"> ■ minimum: 6years (can be reduced by 4 years) ■ maximum: 7years
Requirement for Degree	Foreign Language Test	Implemented in accordance with the guidelines presented by each department(school)/major		
	Oral Test (Major)	Implemented in accordance with the guidelines presented by each dept.(school)	-	-
	Research Proposal	-	Should be submitted within two years after entrance	
	Publication	-	Implemented in accordance with the guidelines presented by each department(school)/major	
	Thesis/Dissertation Defense	Implemented in accordance with the guidelines presented by each department(school)/major		

- * The credit requirements above apply to students who enter from 2018 on wards.
- * The credit requirements above is the minimum credit and students must meet their department's requirements.
- * **Course Credits:** Credits earned for lecture courses in curriculum.
- * **Research Credits:** Credits earned for courses such as Doctoral Research, Master's Research, and Seminars.
- * **Research Proposal :** For students entered 2018 and before, refer to previous requirements

2. Comprehensive Exam 종합시험

Types of Test 시험유형

- Foreign Language Test 외국어 시험
- Oral Test (Major): Applicable to students in Master's Program
구두시험(전공): 석사과정 해당
- Qualifying Exam(Q.E.): Applicable to students in Doctoral Program and Combined Master's-Doctoral Program
박사자격시험(Q.E.): 박사과정 및 석·박사 통합과정 해당

Foreign Language Test 외국어 시험

- Implemented in accordance with the guidelines presented by each department(school)/major
외국어시험: 대학원 전공별 요건에 따름

Oral Test 구두시험

- Students in a Master's program must pass an oral test related to their major. The test can be given at the same time as the thesis defense.
석사과정 학생은 논문 디펜스 시 구두시험 통과해야 함

Qualifying Exam 자격시험

- Doctoral and Combined Master's-Doctoral program students are required to pass the qualifying exam within 3 years after enrollment. Otherwise they are not allowed to submit their dissertations. In case student changes their major, the Qualifying Exam of changed major must be completed within 3 years. If a major is changed after three years, students must take changed major Qualifying Exam within three semesters of changing major.

박사과정 및 석·박사 통합과정 학생은 재학기간 3년 이내 Q.E.시험 통과해야 함. 그렇지 않을 경우 논문 제출 불가. 전공을 변경한 학생은 변경한 전공의 박사자격시험을 통과하여야 함. 3년이 경과한 후 전공을 변경하는 경우 전공을 변경한 3개 학기 이내에 박사자격시험에 응시하여야 함

- The Qualifying Exam will be administered along with the guidelines presented by each major.

Q.E.는 전공별 기준에 따라 시행

3. Thesis Preparation 논문준비

□ Research Proposal 논문연구계획서

* *It is not applicable to students in a Master's program* 석사과정 해당 없음

- A student planning to write a doctoral dissertation should submit a research proposal within two years after entrance. (applied to students who entered from Spring 2019) *In case of students who have changed their degree program from Master's to Combined MS-Ph.D two years after admission, they must submit research proposal until the last day of degree changed semester.

박사학위 논문을 작성하려는 학생은 논문지도교수의 지도를 받아 입학 후 2년 이내 논문연구계획서 제출 필요 (2019학년도 1학기 입학생부터 적용). 입학 후 2년이 경과하여 과정변경을 신청한 학생의 경우 과정변경이 적용되는 당해학기까지 논문연구계획서를 제출

□ Nomination of Thesis Dissertation Examining Committee 논문심사위원 위촉

- All students must submit a list of proposed thesis committee members by the end of the third quarter of the semester, provided that the student has successfully passed the Oral Test(Master), QE(Doctoral, Combined), English Test and has acquired required credits with a minimum 3.0 GPA. 모든 학생은 수업일수 3/4 선까지 논문심사위원 위촉서 제출, 전공구두시험(석사), QE(박사, 통합), 외국어시험, 평점평균 3.0이상 요건 구비 필요

- The Nomination of Thesis/Dissertation Examining Committee template must then be completed by the student, signed by each committee members and submitted to Academic&Students Affairs Team in each college(for School of Business Administration: administrative office)

각 논문심사위원 승인을 받아 소속 단과대학 교학팀 또는 학부행정실에 논문심사위촉서 제출

- A master's student's thesis committee must consist of at least three members(including the advisor). One of the thesis committee members might be outside UNIST with a related doctoral degree. 석사과정은 논문심사위원은 논문지도교수포함 3명을 위촉. 석사 논문심사위원 중 1명은 유사한 분야의 박사학위를 소지한 외부 인사를 위촉할 수 있음.

- A doctoral/combined master's-doctoral student's thesis committee must consist of at least five members (including the advisor). Outsiders with a doctorate in a similar field or Faculty members from other departments must be appointed as one or more of the dissertation examiners, and there shall be three or more professors of UNIST.

박사 및 석·박사 통합과정은 논문심사위원이 논문지도교수 포함 5명(5명 중 1명 이상은 유사한 분야의 박사학위를 소지한 타 학과 교원 또는 외부인사를 반드시 위촉하여야 하며 울산과기원 교수가 3명 이상이어야 함)

□ Plagiarism Checker: Turn it in 표절검사

- All students should submit the result of the plagiarism analysis for their thesis when they defend their theses to the committee members. There is a plagiarism checker, called turn it in (<http://www.turnitin.com>) where the student can check his/her work for potential plagiarism by comparing it against the world's largest comparison database. 논문 디펜스 시 논문표절검사 결과 제출 필요
- A log-in account is issued when the student applies for the application through the Library homepage 로그인 계정은 도서관 홈페이지에서 신청하여 발급

□ Thesis Submission 논문 제출

- Students who pass the thesis defense and are ready for graduation, a hard cover thesis along with the electronic file should be submitted to the library during the designated period: 3 copies for Master's degrees and 3 copies for doctoral degrees.
디펜스 통과 후 지정된 기간 중 문헌정보팀에 전자파일 및 양장본 제출(석사 3부, 박사 3부)

4. Degree Completion Process 학위이수과정

4-1 Master's Program Timeline

This chart displays the expected timeframe for completion of the major milestones in the program for the class entering in Fall 2024.

Master's Program Timeline Class Entering Fall 2024					
2024	2025		2026		
2 nd semester	1 st semester	2 nd semester	1 st semester	JULY	AUG.
■	Matriculation				
■	Selection of Major and Advisor				
2 Years of Class Period					
				■	
			Course Completion		
				■	
		Nomination of Thesis Committee			
				■	
		Thesis Defense			
				■	
		Thesis Committee Approval			
				■	
		Hardcover/E-file Thesis Submission			
				■	
					■
		Graduation			

□ Steps for Master's Degree

<p>Selection of Major and advisor</p> <ul style="list-style-type: none"> □ When: Beginning of first semester □ How: Apply through portal. 	<p>Foreign Language Test</p> <p>Implemented in accordance with the guidelines presented by each department(school)/major</p>	<p>Oral Test (Major)</p> <ul style="list-style-type: none"> □ When: The dates will be announced by the department. Oral test and thesis defense can be executed simultaneously. □ How: Students take an oral test on knowledge about major courses in English.
<p>Nomination of Thesis Committee</p> <ul style="list-style-type: none"> □ When: By the end of the third quarter of the semester (After making thesis outline.) □ How: The advisor recommends the committee and report to the Vice President of Academic Affairs. 	<p>Course Completion</p> <ul style="list-style-type: none"> □ When: 2 years or shorter ((exceptional)) □ How: <ul style="list-style-type: none"> -Duration: two years, -Credits: at least 28 credits -GPA: over 3.0. 	<p>Thesis Defense</p> <ul style="list-style-type: none"> □ When: By the last week of the semester (After The final version of thesis draft is made) □ How: Defense on the thesis by oral and documentary test.
<p>Reporting the result of thesis defense</p> <ul style="list-style-type: none"> □ When: students are notified within the two weeks after the defense. □ How: The committee signs the thesis approval form and student submit the form to affiliated department/School. 	<p>Thesis(Hard Cover) Submission</p> <ul style="list-style-type: none"> □ When: In the designated period. □ How: Submit 3 hard copies and electronic copy to the Library. 	<p>Screening of Candidates for graduation (Each Department)</p> <ul style="list-style-type: none"> □ When: During July/January □ How: When each school finishes the screening process, the list of prospective graduates is forwarded to the Academic Affairs Operation Committee
<p>Screening of Candidates for graduation(Committee)</p> <ul style="list-style-type: none"> □ When: During July/January □ How: The Academic Affairs Operation Committee confirms the list of prospective graduates. 	<p>Commencement</p> <ul style="list-style-type: none"> □ When: On Feb. or Aug. 	

4-2

Doctoral Program Timeline

This chart displays the expected timeframe for completion of the major milestones in the program for the class entering in Fall 2024.

Doctoral Program Timeline Class Entering Fall 2024									
2024	2025		2026		2027		2028		
2 nd semester	1 st semester	2 nd semester	1 st semester	2 nd semester	1 st semester	2 nd semester	1 st semester	JULY	AUG.
Matriculation									
Selection of Major and Advisor									
4 Years of Class Period									
Submission of Research Proposal									
Qualifying Exam									
Course Completion									
Nomination of Thesis Committee									
Thesis Defense									
Thesis Committee Approval									
Hardcover/E-file Thesis Submission									
Graduation									

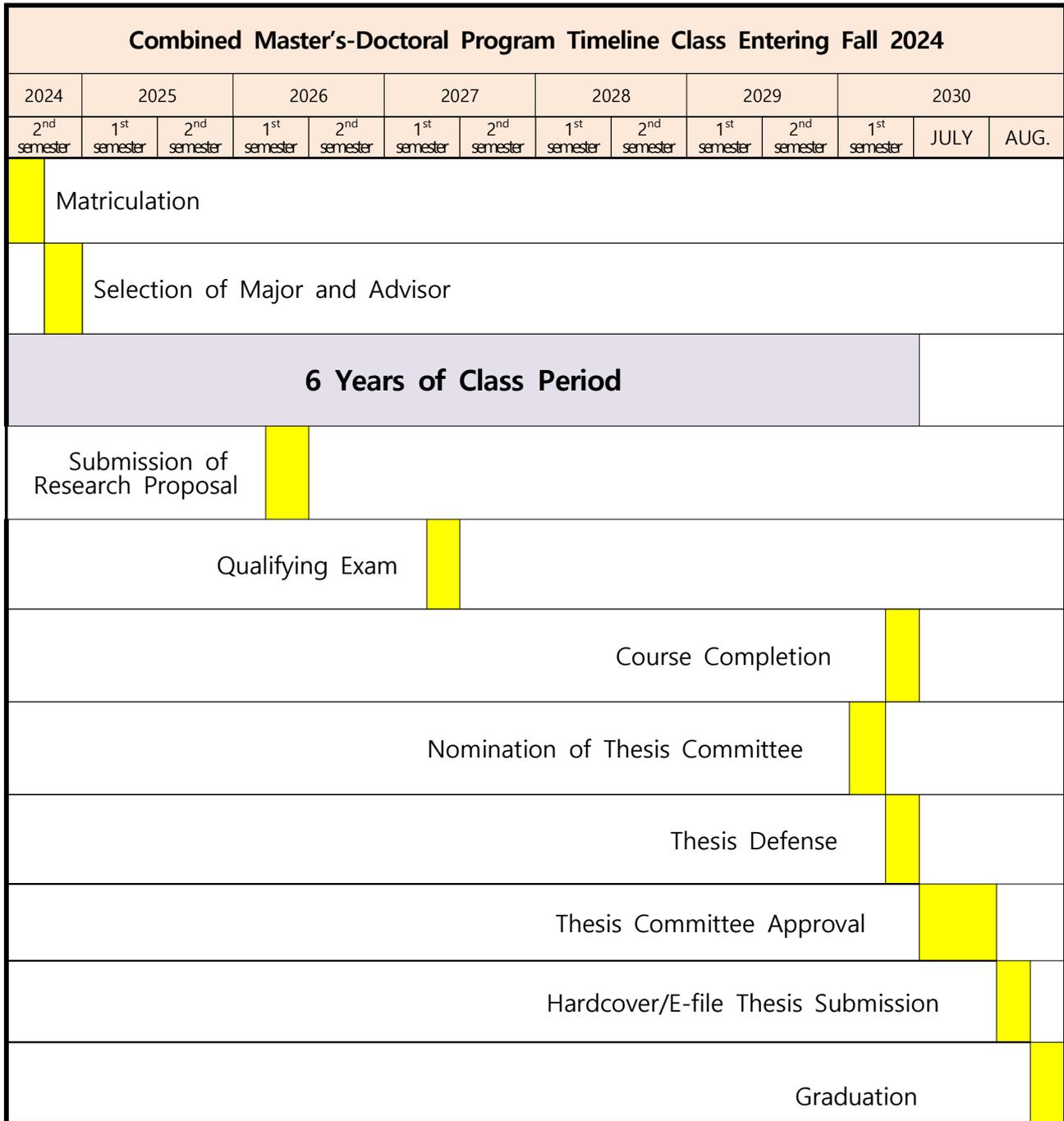
Steps for Doctoral Degree

<p>Selection of Program and advisor</p> <ul style="list-style-type: none"> <input type="checkbox"/> When: Beginning of first semester <input type="checkbox"/> How: Apply through portal. 	⇒	<p>Research Proposal Submission</p> <ul style="list-style-type: none"> <input type="checkbox"/> When: Submit within 2 years after entrance. <input type="checkbox"/> How: Submit it to the Portal after approvals of the advisor and the department(school) head. 	⇒	<p>Foreign Language Test</p> <p>Implemented in accordance with the guidelines presented by each department(school)/major</p>
<p>Qualifying Exam(Q.E)</p> <ul style="list-style-type: none"> <input type="checkbox"/> When: Must be passed within 3 years after entrance(6th semester) <input type="checkbox"/> How: After students submit the application, exams are administered under self regulation by each department. 	⇒	<p>Report the Q.E Result</p> <ul style="list-style-type: none"> <input type="checkbox"/> When: Within one month after the exam. <input type="checkbox"/> How: Each department submits the report to the Vice President of Academic Affairs 	⇒	<p>Publication</p> <ul style="list-style-type: none"> <input type="checkbox"/> When: Before submitting the [Nomination of Thesis/Dissertation Committee]. <input type="checkbox"/> How: Submit evidence of publication to the school office.
<p>Nomination of Dissertation Committee</p> <ul style="list-style-type: none"> <input type="checkbox"/> When: By the end of 3/4 of the semester. (After making thesis outline.) <input type="checkbox"/> How: The advisor recommends the committee and report to the Vice President of Academic Affairs. 	⇒	<p>Dissertation Defense</p> <ul style="list-style-type: none"> <input type="checkbox"/> When: By the last week of the semester.(After the final version of thesis draft is made) <input type="checkbox"/> How: Defense on the thesis by oral and documentary test are administered. 	⇒	<p>Reporting the result of dissertation defense</p> <ul style="list-style-type: none"> <input type="checkbox"/> When: Notified to the students within two weeks after the defense. <input type="checkbox"/> How: The committee signs the thesis approval form and student submit the form to affiliated department/School.
<p>Dissertation Submission (Hard Cover)</p> <ul style="list-style-type: none"> <input type="checkbox"/> When: In the designated period. <input type="checkbox"/> How: Submit 3 hard copies and electronic copy to the Library. 	⇒	<p>Screening of Candidates for graduation (Each Department)</p> <ul style="list-style-type: none"> <input type="checkbox"/> When: July/January <input type="checkbox"/> How: When each school finishes the screening process, the list of prospective graduates is forwarded to the Academic Affairs Operation Committee 	⇒	<p>Screening of Candidates for graduation (Committee)</p> <ul style="list-style-type: none"> <input type="checkbox"/> When: July/January <input type="checkbox"/> The Academic Affairs Operation Committee confirms the list of prospective graduates.
<p>Commencement</p> <ul style="list-style-type: none"> <input type="checkbox"/> When: On Feb. or Aug. 				

4-3

Combined Master's-Doctoral Program Timeline

This chart displays the expected timeframe for completion of the major milestones in the program for the class entering in Fall 2024.



5. Department and Major of Graduate Program for 2024 Fall

2024학년도 2학기 대학원과정 학과 및 세부전공

단과대학 College	학과(부) Department(School)	세부전공 Major	
공과대학 College of Engineering	기계공학과 Dept. of Mechanical Engineering	기계공학 Mechanical Engineering	
	지구환경도시건설공학과 Dept. of Civil, Urban, Earth, and Environmental Engineering	환경과학공학 Environmental Science and Engineering	도시건설공학 Urban Infrastructure Engineering
		재난관리공학 Disaster Management Engineering	물에너지융합 Water-Energy Nexus
		반도체 소재·부품 대학원 Graduate School of Semiconductor Materials and Devices Engineering	반도체소재부품공학 Semiconductor Materials and Devices Engineering
		신소재공학과 Dept. of Materials Science and Engineering	신소재공학 Materials Science and Engineering
	에너지화학공학과 School of Energy and Chemical Engineering	에너지공학 Energy Engineering	에너지공학(배터리과학및기술) Energy Engineering (Battery Science and Technology)
		화학공학 Chemical Engineering	화학공학 Chemical Engineering
	원자력공학과 Dept. of Nuclear Engineering	원자력공학 Nuclear Engineering	탄소중립융합(에너지공학) Carbon Neutrality (Energy Engineering)
	탄소중립대학원 Graduate School of Carbon Neutrality	탄소중립융합(화학공학) Carbon Neutrality (Chemical Engineering)	탄소중립융합(환경) Carbon Neutrality (Environment)
		디자인학과 Dept. of Design	디자인학 Design
산업공학과 Dept. of Industrial Engineering		산업공학 Industrial Engineering	
정보바이오 융합대학 College of Information and Biotechnology	바이오메디컬공학과 Dept. of Biomedical Engineering	바이오메디컬공학 Biomedical Engineering	
	생명과학과 Dept. of Biological Sciences	생명과학 Biological Sciences	
	인공지능대학원 Graduate School of Artificial Intelligence	인공지능학 Artificial Intelligence	
	의과학대학원 Graduate School of Health Science and Technology	혁신의학 Health Innovation and Entrepreneurship	의과학 Health Science and Technology
		전기전자공학과 Dept. of Electrical Engineering	전기전자공학 Electrical Engineering
	컴퓨터공학과 Dept. of Computer Science and Engineering	컴퓨터공학 Computer Science and Engineering	
	ICT 융합 석사프로그램 Master Degree Program in Information & Communication Technology (ICT) Convergence	ICT융합 Information & Communication Technology (ICT) Convergence	
	자연과학 대학 College of Natural Sciences	물리학과 Dept. of Physics	물리학 Physics
		응용물리학 Applied Physics	수리과학 Mathematical Sciences
		수리과학과 Dept. of Mathematical Sciences	화학 Chemistry
화학과 Dept. of Chemistry	경영과학부 School of Business Administration	경영공학 Management Engineering	

6. Degree Requirements by Department(School) and Major 학과(부) 및 전공별 학위수여요건

※ Due to revision of Regulations on the degree conferment, degree requirements by department and major may subject to change 학위수여규정 개정에 따라 학과별 졸업요건이 변경될 수 있음

Department of Mechanical Engineering Major: Mechanical Engineering

Course	Master's	Doctoral	Combined Master's Doctoral								
Credit	At least 28 (course credit: 18, research credit: 10)	At least 60 (course credit: 18, research credit: 42)	At least 60 (course credit: 30, research credit: 30)								
Mandatory course	The Seminar: At least 2 credit, Master's Research: At least 8 credits	The Seminar: At least 2 credit, Doctoral Research: At least 12 credits	The Seminar: At least 3 credit, Doctoral Research: At least 21 credits								
Publication	At least one conference presentation or a paper accepted for publication in an SCI or SCI-E journal as the first author is required.	At least one paper accepted for publication in an SCI or SCI-E journal as the first author									
Foreign Language Test	* One of the below should be submitted by the end of the third quarter of the semester for Nomination of Thesis Examining Committee. * The regulation related to TEPS score shall be applied to the tests from No. 248 TEPS(2018.05.12.). The tests before No. 248 TEPS(2018.05.12.) shall be subject to the previous school regulations (TEPS 640).										
	TEST	TOEIC	TOEFL (IBT)	TOEFL (CBT)	TOEFL (PBT)	IELTS	TEPS	OPIC	G-TELP (Level2)	G-TELP (Level3)	TOEIC (Speaking& Writing)
	SCORE	800	80	213	550	5.5	309	IH	67	89	270
	* The foreign language test shall be accepted as passed if the score is higher than the following scores specified. However, native speakers from six countries (the United States, Canada, the UK, Australia, New Zealand, and Ireland) whose native language is English or students with documents which certify that they were instructed for all their courses in English during their undergraduate or higher degree programs shall be recognized as passing the foreign language test.										
Note	Up to 6 credits of undergraduate(400-level) courses may be taken with the consent of thesis advisor and instructor, and be counted toward credit requirement. For students who fail to meet the requirement for publication, the department committee of academic affairs can decide on their graduation after discussing.										

* Additional measures for students who fail to meet publication requirement applies to all students in ME.

Department of Civil, Urban, Earth, and Environmental Engineering

○ Concentration

- ESE: Environmental Science and Engineering - UIE: Urban Infrastructure Engineering
- DME: Disaster Management Engineering - WEN: Water-Energy Nexus

Course	Master's	Doctoral	Combined Master's Doctoral																						
Credit	At least 28 (course credit: 24, research credit: 4)	At least 60 (course credit: 18, research credit: 42)	At least 60 (course credit: 36, research credit: 24)																						
Publication	Not required	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">Major</th> <th style="width: 33%;">Doctoral</th> <th style="width: 34%;">Ms-Ph.D</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Environmental Science</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> </tr> <tr> <td style="text-align: center;">Environmental Engineering</td> <td style="text-align: center;">3</td> <td style="text-align: center;">3</td> </tr> <tr> <td style="text-align: center;">Water-Energy Nexus</td> <td style="text-align: center;">3</td> <td style="text-align: center;">3</td> </tr> <tr> <td style="text-align: center;">Urban Infrastructure Engineering</td> <td style="text-align: center;">1</td> <td style="text-align: center;">1</td> </tr> <tr> <td style="text-align: center;">Disaster Management Engineering</td> <td colspan="2" style="text-align: center;">Committee can apply ESE and UIE's standards to the thesis considering his/her research field.</td> </tr> </tbody> </table>		Major	Doctoral	Ms-Ph.D	Environmental Science	2	3	Environmental Engineering	3	3	Water-Energy Nexus	3	3	Urban Infrastructure Engineering	1	1	Disaster Management Engineering	Committee can apply ESE and UIE's standards to the thesis considering his/her research field.					
		Major	Doctoral	Ms-Ph.D																					
		Environmental Science	2	3																					
		Environmental Engineering	3	3																					
		Water-Energy Nexus	3	3																					
		Urban Infrastructure Engineering	1	1																					
Disaster Management Engineering	Committee can apply ESE and UIE's standards to the thesis considering his/her research field.																								
<p>* It can be accepted if the student is the 1st author or corresponding author being official UNIST's student. Also, the advisor of the student should be ascertain as a corresponding author.</p> <p>* A transferred student with advisor changing's achievement could be accepted under committee's review</p>																									
Foreign Language Test	<p>* Students are required to submit the official English test result by the third quarter of the semester they graduate. (At least before they nominate thesis committee)</p> <p>* The regulation related to TEPS score shall be applied to the tests from No. 248 TEPS(2018.05.12.). Tests before No. 248 TEPS(2018.05.12.) shall be subject to the previous school regulations (TEPS 640).</p>																								
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	TEST	TOEIC	TOEFL (IBT)	TOEFL (CBT)	TOEFL (PBT)	IELTS	TEPS	OPIC	G-TELP (Level2)	G-TELP (Level3)	TOEIC (Speaking & Writing)														
SCORE	800	80	213	550	5.5	309	IH	67	89	270															
<p>* Native speakers from six English-speaking countries (United States, Canada, Britain, Australia, New Zealand, Ireland) or students who submit a certificate that states all classes student took are taught in English (bachelor's course or higher) are recognized to meet the criteria above.</p>																									
Note	<p>* In all four majors (ESE, UIE, DME, WEN): manuscripts of 'Accepted for Publication' are also acknowledged as required fulfillment.</p>																								

Graduate School of Semiconductor Materials and Devices Engineering

Major: Semiconductor Materials and Devices Engineering

Course	Master's	Doctoral	Combined Master's Doctoral																						
Credit	At least 28 (course credit: 18, research credit: 10)	At least 60 (course credit: 12, research credit: 48)	At least 60 (course credit: 24 research credit: 36)																						
Mandatory course	<ul style="list-style-type: none"> • (SE510)Advanced Semiconductor Process: Bridging Theory and Practice • (SE511)Semiconductor Processing and Device Lab • The Seminar: At least 2 credits (SE590 only) • Master's Research: At least 8 credits 	<ul style="list-style-type: none"> • (SE510)Advanced Semiconductor Process: Bridging Theory and Practice • (SE511)Semiconductor Processing and Device Lab • The Seminar: At least 2 credits (SE590 only) • Doctoral Research: At least 46 credits 	<ul style="list-style-type: none"> • (SE510)Advanced Semiconductor Process: Bridging Theory and Practice • (SE511)Semiconductor Processing and Device Lab • The Seminar: At least 2 credits (SE590 only) • Doctoral Research: At least 34 credits 																						
TA	Not required	Once																							
Publication	At least one conference presentation or a paper accepted for publication in an SCI or SCI-E journal as the first author is required	At least one paper accepted for publication in an SCI or SCI-E journal as the first author																							
Foreign Language Test	<p>Students must complete one of below requirements</p> <p>(1) Submit English Qualification Test Score</p> <p>※ The foreign language test shall be accepted as passed if the score is higher than the following scores specified. However, native speakers from six countries (the United States, Canada, the UK, Australia, New Zealand, and Ireland) whose native language is English or students with documents which certify that they were instructed for all their courses in English during their undergraduate or higher degree programs shall be recognized as passing the foreign language test.</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>TEST</th> <th>TOEIC</th> <th>TOEFL (IBT)</th> <th>TOEFL (CBT)</th> <th>TOEFL (PBT)</th> <th>IELTS</th> <th>TEPS</th> <th>OPIC</th> <th>G-TELP (Level2)</th> <th>G-TELP (Level3)</th> <th>TOEIC (Speaking& Writing)</th> </tr> </thead> <tbody> <tr> <td>SCORE</td> <td>800</td> <td>80</td> <td>213</td> <td>550</td> <td>5.5</td> <td>309</td> <td>IH</td> <td>67</td> <td>89</td> <td>270</td> </tr> </tbody> </table> <p>(2) Take SLA590 Writing in Academic Disciplines course or SLA591 Technical Writing in English (3 credits, this course will not be counted in course credit)</p>			TEST	TOEIC	TOEFL (IBT)	TOEFL (CBT)	TOEFL (PBT)	IELTS	TEPS	OPIC	G-TELP (Level2)	G-TELP (Level3)	TOEIC (Speaking& Writing)	SCORE	800	80	213	550	5.5	309	IH	67	89	270
TEST	TOEIC	TOEFL (IBT)	TOEFL (CBT)	TOEFL (PBT)	IELTS	TEPS	OPIC	G-TELP (Level2)	G-TELP (Level3)	TOEIC (Speaking& Writing)															
SCORE	800	80	213	550	5.5	309	IH	67	89	270															
Note	Foreign Language Test requirement applies to all SE students regardless of their entrance year. (In the case of (2) above, it may not be possible to apply for the classes due to a lack of seats, so we recommend (1) if possible.)																								

Department of Materials Science and Engineering

Major: Materials Science and Engineering

Course	Master's	Doctoral	Combined Master's Doctoral																					
Credit	At least 28 (course credit: 18, research credit: 10)	At least 60 (course credit: 12, research credit: 48)	At least 60 (course credit: 24, research credit: 36)																					
Mandatory course	The Seminar: At least 2 credits (MSE Seminar Only), Research Course: At least 8 credits	The Seminar: At least 3 credits (MSE Seminar Only), Research Course: At least 45 credits	The Seminar: At least 4 credits (MSE Seminar Only), Research Course: At least 32 credits																					
TA	Not required	Once																						
Publication	At least one conference presentation as a presenting author or a paper accepted for publication in an SCI(E) journal as the first author is required	At least one paper accepted for publication in an SCI(E) journal as the first author																						
Foreign Language Test	Students must complete one of below requirements (1) Submit English Qualification Test Score ※ The foreign language test shall be accepted as passed if the score is higher than the following scores specified. However, native speakers from six countries (the United States, Canada, the UK, Australia, New Zealand, and Ireland) whose native language is English or students with documents which certify that they were instructed for all their courses in English during their undergraduate or higher degree programs shall be recognized as passing the foreign language test.																							
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TEST	TOEIC	TOEFL (IBT)	TOEFL (CBT)	TOEFL (PBT)	IELTS	TEPS	OPIC	G-TELP (Level2)	G-TELP (Level3)	TOEIC (Speaking& Writing)														
SCORE	800	80	213	550	5.5	309	IH	67	89	270														
	(2) Take SLA590(Writing in Academic Disciplines course) or SLA591(Technical Writing in English): 3 credits * This course will not be counted in course credit.																							
Note	Foreign Language Test requirement applies to all MSE students regardless of their entrance year. (In the case of (2) above, it may not be possible to apply for the classes due to a lack of seats, so we recommend (1) if possible.)																							

[Interim Measures]

1) The TA requirement above can be applied retroactively to students who entered before 2020. For Korean students eligible for technical research personnel: The TA requirement must be completed before transferring to technical research personnel.

(Korean Students Only: 단, 전문연 편입 학생의 경우 편입 전 TA 요건을 반드시 완료해야 함.)

2) Master's students giving presentation for their graduation requirement should give a presentation as a main presenter

School of Energy and Chemical Engineering
Major: Energy Engineering,
Energy Engineering (Battery Science and Technology)

Course	Master's	Doctoral	Combined Master's Doctoral					
Credit	At least 28 (course credit: 15, research credit: 13)	At least 60 (course credit: 15, research credit: 45)	At least 60 (course credit: 24, research credit: 36)					
Mandatory course	ECHE590 Seminar: At least 2 credits	ECHE590 seminar: At least 3 credits						
Publication	Not required	Publish at least two international journals(SCI(E), 1st author) since the admission of a current study course Review papers will not be accepted in case of Cell/Nature/Science (except sister journals), 1 paper can be recognized as a fulfillment of requirements ※ The approval of the school graduate committee is required for the publication qualification						
TA	Students majoring in Energy Engineering must conduct 1 TA activity of any major course before graduation							
Foreign Language Test	One of the below should be submitted by the end of the third quarter of the semester for Nomination of Thesis Examining Committee. <input type="checkbox"/> English test score standard							
	TOEIC	TOEFL (IBT)	IELTS	OPIC	TEPS (NEW)	G-TELP (Lv.2)	G-TELP (Lv.3)	TOEIC S&W
	800	80	5.5	IH	309	67	89	270
The foreign language test shall be accepted as passed if the score is higher than the following scores specified. However, native speakers from six countries (the United States, Canada, the UK, Australia, New Zealand, and Ireland) whose native language is English or students with documents which certify that they were instructed for all their courses in English during their undergraduate or higher degree programs shall be recognized as passing the foreign language test.								

School of Energy and Chemical Engineering

Major: Chemical Engineering

Course	Master's	Doctoral	Combined Master's Doctoral					
Credit	Minimum 28 (course credit: 15, research credit: 13)	Minimum 60 (course credit: 12, research credit: 48)	Minimum 60 (course credit: 21, research credit: 39)					
Mandatory course	ECHE590 Seminar: Minimum 1 credits	ECHE590 seminars: Minimum 2 credits						
Publication	Not required	Publish at least two international journals(SCI(E), 1st author) since the admission of a current study course Review papers will not be accepted in case of Cell/Nature/Science (except sister journals), 1 paper can be recognized as a fulfillment of requirements ※ The approval of the school graduate committee is required for the publication qualification						
TA	Students majoring in Chemical Engineering must conduct 1 TA activity of any major course before graduation							
Foreign Language Test	One of the below should be submitted by the end of the third quarter of the semester for Nomination of Thesis Examining Committee. <input type="checkbox"/> English test score standard							
	TOEIC	TOEFL (IBT)	IELTS	OPIC	TEPS (NEW)	G-TELP (Lv.2)	G-TELP (Lv.3)	TOEIC S&W
	800	80	5.5	IH	309	67	89	270
The foreign language test shall be accepted as passed if the score is higher than the following scores specified. However, native speakers from six countries (the United States, Canada, the UK, Australia, New Zealand, and Ireland) whose native language is English or students with documents which certify that they were instructed for all their courses in English during their undergraduate or higher degree programs shall be recognized as passing the foreign language test.								

Department of Nuclear Engineering

Major: Nuclear Engineering

Course	Master's	Doctoral	Combined Master's Doctoral
Credit	At least 28 (course credit: 18, research credit: 10)	At least 60 (course credit: 24, research credit: 36)	At least 60 (course credit: 33, research credit: 27)
Mandatory course	The Seminars: At least 1 credit	The Seminars: At least 1 credit	
Publication	Not required	Not required	
Thesis Review	Not required	Submit a proposal to the advisor before defense	
Note	Mandatory courses are required for the course completion.	Mandatory courses are required for the course completion.	

Graduate School of Carbon Neutrality
Carbon Neutrality(Energy Engineering),
Carbon Neutrality(Chemical Engineering),
Carbon Neutrality(Environment)

Course	Master's	Doctoral	Combined Master's Doctoral
Credit	At least 28 (course credit: 18, research credit: 10)	At least 60 (course credit: 15, research credit: 45)	At least 60 (course credit: 24, research credit: 36)
Mandatory course	1) The Seminar: At least 2 credits 2) Required Course : CN510, CN520	1) The Seminar: At least 2 credits 2) Required Course : CN510, CN520	1) The Seminar: At least 2 credits 2) Required Course : CN510, CN520
Publication	Not required	At least one paper publication in SCI(E) journal as the first author * Being accepted is also acknowledged	
Foreign Language Test	Not required		

Department of Design

Major: Design

Course	Master's	Doctoral	Combined Master's Doctoral								
Credit	At least 28 (course credit: 15, research credit: 13)	At least 60 (course credit: 12, research credit: 48)	At least 60 (course credit: 24, research credit: 36)								
Mandatory course*	<ul style="list-style-type: none"> - The Seminars - Master Graduation Project (MGP) 	<ul style="list-style-type: none"> - The Seminars - Doctoral Research 									
Publication	<p>Choose ① or ②:</p> <p>① Submission of a paper from Master Graduation Project OR Research to a domestic journal or an international conference proceedings as the 1st author.</p> <ul style="list-style-type: none"> - Design-related KCI journals - IASDR, ICED, Design & Emotion, HCI, CHI, TEI, DIS, etc. <p>② Submission of a design work from Master Graduation Project to an internationally well-known design competition OR a video showcase.</p> <ul style="list-style-type: none"> - iF design awards, Red dots, IDEA, etc. - CHI video showcase, etc. 	<p>At least two doctoral research-related papers published(or Accepted) in the following as the 1st author:</p> <p>① One journal publication listed in L1 OR indexed in SCIE, A&HCI and SSCI OR Top 5 in Google Scholar Ranking venues (journal or conference in any category).</p> <p>② One international journal OR international conference proceedings not listed in L1. The final decision regarding the submitted publications' ability to meet the requirements stated above shall be made by the doctoral committee*.</p>									
Foreign Language Test	<p>* One of the below should be submitted by the end of the third quarter of the semester for Nomination of Thesis Examining Committee.</p> <p>* The regulation related to TEPS score shall be applied to the tests from No. 248 TEPS(2018.05.12.). The tests before No. 248 TEPS(2018.05.12.) shall be subject to the previous school regulations (TEPS 640).</p>										
	TEST	TOEIC	TOEFL (IBT)	TOEFL (CBT)	TOEFL (PBT)	IELTS	TEPS	OPIC	G-TELP (Level2)	G-TELP (Level3)	TOEIC (Speaking& Writing)
	SCORE	800	80	213	550	5.5	309	IH	67	89	270
	<p>The foreign language test shall be accepted as passed if the score is higher than the following scores specified. However, native speakers from six countries (the United States, Canada, the UK, Australia, New Zealand, and Ireland) whose native language is English or students with documents which certify that they were instructed for all their courses in English during their undergraduate or higher degree programs shall be recognized as passing the foreign language test.</p>										
Note	-	<p>In exceptional cases that must be accepted by the doctoral committee, any evidence of professional research quality related to his/her doctoral research such as awards, intellectual property and invited exhibition may be considered an equivalent to a publication in an international journal OR conference proceedings not listed in L1.</p>									

As some of the mandatory courses have been abolished and changed that they are no longer to take as required courses, and it is adapted to Design and CDE Graduate school students who've entered before 2021.

- Changed: (DES701) Research Methodology → (DES701) Design for Wellbeing
- Closed: (DES705) Research Issues in Design → X

Department of Industrial Engineering Major: Industrial Engineering

Course	Master's	Doctoral	Combined Master's Doctoral								
Credit	At least 28 (course credit: 21, research credit: 7)	At least 60 (course credit: 15, research credit: 15)	At least 60 (course credit: 24, research credit: 21)								
Mandatory course	Master's Research: At least 7credits.	Doctoral Research: At least 15 credits.	Doctoral Research: At least 21 credits.								
Publication	-	No publication requirement									
Foreign Language Test	<p>* One of the below should be submitted by the end of the third quarter of the semester for Nomination of Thesis Examining Committee.</p> <p>* The regulation related to TEPS score shall be applied to the tests from No. 248 TEPS(2018.05.12.). The tests before No. 248 TEPS(2018.05.12.) shall be subject to the previous school regulations (TEPS 640).</p>										
	TEST	TOEIC	TOEFL (IBT)	TOEFL (CBT)	TOEFL (PBT)	IELTS	TEPS	OPIC	G-TELP (Level2)	G-TELP (Level3)	TOEIC (Speaking & Writing)
	SCORE	800	80	213	550	5.5	309	IH	67	89	270
<p>The foreign language test shall be accepted as passed if the score is higher than the following scores specified. However, native speakers from six countries (the United States, Canada, the UK, Australia, New Zealand, and Ireland) whose native language is English or students with documents which certify that they were instructed for all their courses in English during their undergraduate or higher degree programs shall be recognized as passing the foreign language test.</p>											
<p>* The amended mandatory course credits and QE requirements apply to MS, Doctoral Program and Combined Master's-Doctoral Program students who entered in the 1st semester of 2019 and thereafter, and also retrospectively to students who entered in the 1st and 2nd semester of 2018.</p>											

Department of Biomedical Engineering

Major: Biomedical Engineering

Course	Master's	Doctoral	Combined Master's Doctoral
Credit	At least 28 credits in total (minimum course credits: 15, research credits: 4)	At least 60 credits in total (minimum course credits: 12, research credits: 14)	At least 60 credits in total (minimum course credits: 21, research credits: 18)
Mandatory course	The department seminar: At least 2 credits	The department seminar: At least 3 credits	The department seminar: At least 3 credits
Publication	Not required	Achievements accepted by the thesis committee	
Q.E & Research proposal	Not required	Presentation of the research plan within two years after the graduate school enrollment to get approval from at least three thesis committee members. To pass the Q.E., the result should be submitted to the academic affairs team after getting the committee's approval.	
Preliminary thesis presentation	Not required	Presentation of the research achievements and the thesis plan, approved by at least three thesis committee members. It is recommended to be done at least one year before graduation.	
Thesis presentation	Presentation of the research achievements approved by attending three committee members	Presentation of the research achievements approved by attending five committee members (at least one member should not be affiliated with the same department).	

* Above rules apply to all current students.

Department of Biological Sciences

Major: Biological Sciences

Course	Master's	Doctoral	Combined Master's Doctoral								
Credit	At least 28 (course credit: at least 21, research credit: at least 7)	At least 60 (course credit: at least 15, research credit: at least 17)	At least 60 (course credit: at least 30, research credit: at least 24)								
Mandatory course	The Seminar: At least 2 credits	The Seminar: At least 3 credits	The Seminar: At least 3 credits								
Pre-defense Meeting	Not required	<ul style="list-style-type: none"> The thesis committee should hold at least one progress/pre-defense meeting and submit the meeting report >six months before the final thesis defense. It will be effective for new graduate students in 2022 and afterward. 									
TA	Once	Theory course(2) or Laboratory course(1) <ul style="list-style-type: none"> Laboratory TA will be assigned by the graduate affairs committee. It will be effective for all current and future graduate students. 									
Publication	Not required	Two first-author papers or one L1* rated first author paper (accepted or published in SCI/SCI-E journals) <ul style="list-style-type: none"> These include research papers contributed equally by co-first authors. The corresponding or co-corresponding author should be candidate's thesis advisor (In the exceptional case, the corresponding or co-corresponding author can be recognized as candidate's advisor by the graduate affairs committee) Review papers are not considered. It will be effective for all current and future graduate students. The eligibility for graduation will be determined based on the evaluation of the thesis committee. * L1 (Top 7 % or impact factor >= 9)									
Foreign Language Test	* One of the below should be submitted by the end of the third quarter of the semester for Nomination of Thesis Examining Committee. * The regulation related to TEPS score shall be applied to the tests from No. 248 TEPS(2018.05.12.). The tests before No. 248 TEPS(2018.05.12.) shall be subject to the previous school regulations (TEPS 640).										
	TEST	TOEIC	TOEFL (IBT)	TOEFL (CBT)	TOEFL (PBT)	IELTS	TEPS	OPIC	G-TELP (Level2)	G-TELP (Level3)	TOEIC (Speaking & Writing)
	SCORE	800	80	213	550	5.5	309	IH	67	89	270
The foreign language test shall be accepted as passed if the score is higher than the following scores specified. However, native speakers from six countries (the United States, Canada, the UK, Australia, New Zealand, and Ireland) whose native language is English or students with documents which certify that they were instructed for all their courses in English during their undergraduate or higher degree programs shall be recognized as passing the foreign language test.											

Graduate School of Artificial Intelligence

Major: Artificial Intelligence

Course	Master's	Doctoral	Combined Master's Doctoral								
Credit*	At least 28 (course credit: 21, research credit: 7)	At least 60 (course credit: 15, research credit: 45)	At least 60 (course credit: 30, research credit: 30)								
Mandatory course	<ul style="list-style-type: none"> - The Seminar: At least 1 credit - Master's Research: At least 6 credits - Core: AI501, AI502, AI503 	<ul style="list-style-type: none"> - The Seminar: At least 1 credit - Doctoral Research: At least 44 credits - Core: AI501, AI502, AI503 	<ul style="list-style-type: none"> - The Seminar: At least 2 credits - Doctoral Research: At least 28 credits - Core: AI501, AI502, AI503 								
TA**	once	Three times	Three times								
Academic Excellence or real-world impact	Not required	<ul style="list-style-type: none"> - Option1: At least one first-authored paper in a premium venue (e.g., an international SCI/SCI-E journal or conference listed in the top conference list officially approved by UNIST AIGS) <li style="text-align: center;">OR - Option2 : Real-world impact performance equivalent to option1 (e.g., start-up, industrial-academic project). Dissertation committee evaluates the real-world impact performance. 									
Foreign Language Test	Students must complete one of below requirements (1) Submit English Qualification Test Score										
	TEST	TOEIC	TOEFL (IBT)	TOEFL (CBT)	TOEFL (PBT)	IELTS	TEPS	OPIC	G-TELP (Level2)	G-TELP (Level3)	TOEIC (Speaking& Writing)
	SCORE	800	80	213	550	5.5	309	IH	67	89	270
	The foreign language test shall be accepted as passed if the score is higher than the following scores specified. However, native speakers from six countries (the United States, Canada, the UK, Australia, New Zealand, and Ireland) whose native language is English or students with documents which certify that they were instructed for all their courses in English during their undergraduate or higher degree programs shall be recognized as passing the foreign language test. (2) Take AI500 Technical Writing in English course (this course will not be counted as course credit) (3) The validity period of English test score in AIGS is up to 5 years from the date of acquisition, and are retroactively applied to students enrolled before 2024.										
Note	Research credit = Seminar + MS research		<ul style="list-style-type: none"> - Research credit = Seminar + Ph.D. research - Accepted for publication 								
<p>※ Students can take Max. 6(MS/Ph.D.) or 9(MS-Ph.D.) credits from other departments to their lecture credits including undergraduate school courses.</p> <p>※ Students who fail to meet the TA requirements must submit the designated form to justify their alternative TA-related activities. The submitted form will be judged by Graduate School of AI, UNIST. (This measure also applies retroactively to current students entered before 2024.)</p>											

Graduate School of Health Science and Technology
Major: Health Innovation and Entrepreneurship

Course	Master's
Credit	At least 29(course credit: 15, research credit: 14)
Mandatory course	1) The Seminar: At least 2 credits(HST590, BIO590, BME590) 2) Required Course: HST501, HST502
Q.E & Research Proposal	Not required

Graduate School of Health Science and Technology
Major: Health Science and Technology

Course	Master's	Doctoral	Combined Master's Doctoral
Credit	At least 28 (course credit: 15, research credit: 4)	At least 60 (course credit: 12, research credit: 14)	At least 60 (course credit: 21, research credit: 18)
Mandatory course	1) The Seminar: At least 2 credits(HST590, BIO590, BME590) 2) Required Course: HST501, HST502		
Q.E & Research Proposal	Not required	Within 2 years into the program. There are 2 options for Q.E. Submit research proposal to headquarters after Q.E.	

Department of Electrical Engineering Major: Electrical Engineering

Course	Master's	Doctoral	Combined Master's Doctoral
Credit	At least 28 (course credit: 21, research credit: 7)	At least 60 (course credit: 18, research credit: 42)	At least 60 (course credit: 33, research credit: 27)
Mandatory course	The Seminar: At least 1 credit, Master's Research: At least 6 credits	The Seminar: At least 2 credit, Doctoral Research: At least 40 credits	The Seminar: At least 3 credit, Doctoral Research: At least 21 credits
Publication	NOT required	At least one first-authored paper (related to the doctoral research topic) in a premium venue :an international SCI/SCI-E journal or conference listed in the top conference list officially approved by UNIST EE/CSE)	
Note	Research credit = Seminar + MS research	Accepted for publication, Research credit = seminar + PhD research	

* Graduate students are obliged to fulfill TA duty every semester.

[Interim Measures]

- (국문) 기존 일반대학원 '전기및전자공학과'로 입학한 학생들의 경우 종전의 '전기및전자공학과'의 연도별 이수요건을 따른다.
- (영문) These guidelines are applicable to the students who entered the graduate program from 2020 fall.

Department of Computer Science and Engineering

Major: Computer Science and Engineering

Course	Master's	Doctoral	Combined Master's Doctoral					
Credit	At least 28 (course credit: 18, research credit: 7)	At least 60 (course credit: 15, research credit: 42)	At least 60 (course credit: 30, research credit: 24)					
Mandatory course	<ul style="list-style-type: none"> • The Seminar: At least 1 credit • Master's Research: At least 6 credits 	<ul style="list-style-type: none"> • The Seminar: At least 2 credits • Doctoral Research: At least 40 credits 	<ul style="list-style-type: none"> • The Seminar: At least 3 credits • Doctoral Research: At least 21 credits 					
Publication	NOT required	L1 conferences and L1 journals approved by UNIST CSE will be considered a premium venue. While other conferences and journals may also be considered, the qualification of these other venues will be determined by the doctoral committee.						
Note	<ul style="list-style-type: none"> • English test score should be submitted before the defense. • Research credit = Seminar + MS research 	<ul style="list-style-type: none"> • English test score should be submitted before the defense. • Accepted for publication • Research credit = seminar + Ph.D. research 						
Foreign Language Test	Students must complete one of below requirements (1) Submit English Qualification Test Score							
	TOEIC	TOEFL (IBT)	IELTS	OPIC	TEPS	G-TELP (Lv.2)	G-TELP (Lv.3)	TOEIC S&W
	800	80	5.5	IH	309	67	89	270
The foreign language test shall be accepted as passed if the score is higher than the following scores specified. However, native speakers from six countries (the United States, Canada, the UK, Australia, New Zealand, and Ireland) whose native language is English or students with documents which certify that they were instructed for all their courses in English during their undergraduate or higher degree programs shall be recognized as passing the foreign language test. (2) Take SLA590 Technical Writing in English course (This course will not be counted as course credit) ※ Students who have entered in 2022 and after can take SLA590 Technical Writing in English instead of submitting a certified English test score.								

[Interim Measure]

(국문) 기존 일반대학원 '컴퓨터공학과'로 입학한 학생들의 경우 종전의 연도별 '컴퓨터공학과' 이수요건을 따른다.

(영문) These guidelines are applicable to the students who entered the graduate program from 2020 fall.

**Master Degree Program
in Information & Communication Technology (ICT)
Convergence
Major: Major in Information & Communication Technology
(ICT) Convergence**

Course	Master's
Credit	At least 30 (course credits: 18, research credits: 12)
Mandatory course	research credit = MS research + research project
Publication	NOT required
Note	

[Notes regarding courses]

Only courses(8~10 courses) designated by Master Degree Program in ICT Convergence provide both real-time online lecture and recorded lecture for the students in this program and they are operated with 2 session lectures.

Students in this program should take at least 18 credits in the designated courses for graduation. A list of the designated courses will be notified to students and can be changed each semester.

- * This course taking requirement applies to students who have entered in 2023 retroactively.
- * Besides the listed courses, students can take other graduate courses in general school.

Department of Physics

Major: Physics

Course	Master's	Doctoral	Combined Master's Doctoral							
Credit	At least 28 Course Credits: 21 Research Credits: 4	At least 60 Course Credits: at least 12 Research Credits: at least 34	At least 60 Course Credits: at least 27 Research Credits: at least 28							
Mandatory course	Seminar At least 1 credit	Seminar At least 1 credit	Seminar At least 1 credit							
Publication	Not required	Publish at least one paper as the first/corresponding author in high-impact international journals. (It should be at least accepted for publication.) ※ The approval of the Department Graduate Committee is required for the publication qualification.								
Foreign Language Test	[Required course] SLA590 Technical Writing in English (This course will be counted as course credit.) *If students submit English Qualification Test, course taking will be exempted. **This requirement shall be applied to students entered in 2022 and after.									
	TOEIC	TOEFL (IBT)	TOEFL (CBT)	TOEFL (PBT)	IELTS	OPIC	TEPS	G-TELP (Level 2)	G-TELP (Level 3)	TOEIC (S&W)
	800	80	213	550	5.5	IH	309	67	89	270
	The foreign language test shall be accepted as passed if the score is higher than the following scores specified. However, native speakers from six countries (the United States, Canada, the UK, Australia, New Zealand, and Ireland) whose native language is English or students with documents which certify that they were instructed for all their courses in English during their undergraduate or higher degree programs shall be recognized as passing the foreign language test.									
Note										

Department of Physics Major: Applied Physics

Course	Master's	Doctoral	Combined Master's Doctoral							
Credit	At least 28 Course Credits: 15 Research Credits: 8	At least 60 Course Credits: at least 12 Research Credits: at least 35	At least 60 Course Credits: at least 21 Research Credits: at least 34							
Mandatory course	Seminar At least 2 credits	Seminar At least 2 credits	Seminar At least 4 credits							
Publication	Not required	Publish at least two papers as the first/corresponding author in high-impact international journals. (It should be at least accepted for publication.) ※ The approval of the Department Graduate Committee is required for the publication qualification.								
Foreign Language Test	[Required course] SLA590 Technical Writing in English (This course will be counted as course credit.) *If students submit English Qualification Test, course taking will be exempted. **This requirement shall be applied to students entered in 2022 and after.									
	TOEIC	TOEFL (IBT)	TOEFL (CBT)	TOEFL (PBT)	IELTS	OPIC	TEPS	G-TELP (Level 2)	G-TELP (Level 3)	TOEIC (S&W)
	800	80	213	550	5.5	IH	309	67	89	270
	The foreign language test shall be accepted as passed if the score is higher than the following scores specified. However, native speakers from six countries (the United States, Canada, the UK, Australia, New Zealand, and Ireland) whose native language is English or students with documents which certify that they were instructed for all their courses in English during their undergraduate or higher degree programs shall be recognized as passing the foreign language test.									
Note										

Department of Mathematical Sciences
Major: Mathematical Sciences

Course	Master's	Doctoral	Combined Master's Doctoral
Credit	At least 28 (Course Credits: at least 15, Research Credits: at least 6)	At least 60 (Course Credits: at least 15, Research Credits: at least 15)	At least 60 (Course Credits: at least 27, Research Credits: at least 21)
Mandatory course	Seminar: At least 1 credit	Seminar: At least 1 credit	Seminar: At least 1 credit
Publication	Not required	At least one paper must be accepted for publication in SCI, SCI-E or SSCI journals as the first or corresponding author. Exemption from the requirement of one publication in SCI/SCIE/SSCI journals is discussed and determined solely by the department's academic affairs committee only after the candidate's advisor submits to the committee a written statement for exemption.	

Department of Chemistry

Major: Chemistry

Course	Master's	Doctoral	Combined Master's Doctoral																				
Credit	At least 28 Course Credits: 15 Research Credits: 13	At least 60 Course Credits: at least 12 Research Credits: at least 20	At least 60 Course Credits: at least 21 Research Credits: at least 33																				
Mandatory course	Seminar At least 2 credits	Seminar At least 2 credits	Seminar At least 4 credits																				
Publication	Not required	Publish at least one paper in an international journal as the first author. ※ Qualification of publications under this requirement is subject to approval by the Department Graduate committee.																					
Foreign Language Test	Not required	Students must complete one of below requirements (1) Submit English Qualification Test Score <table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th>TOEIC</th> <th>TOEFL (IBT)</th> <th>TOEFL (CBT)</th> <th>TOEFL (PBT)</th> <th>IELTS</th> <th>OPIC</th> <th>TEPS</th> <th>G-TELP (Level 2)</th> <th>G-TELP (Level 3)</th> <th>TOEIC (S&W)</th> </tr> </thead> <tbody> <tr> <td>800</td> <td>80</td> <td>213</td> <td>550</td> <td>5.5</td> <td>IH</td> <td>309</td> <td>67</td> <td>89</td> <td>270</td> </tr> </tbody> </table> The foreign language test shall be accepted as passed if the score is higher than the following scores specified. However, native speakers from six countries (the United States, Canada, the UK, Australia, New Zealand, and Ireland) whose native language is English or students with documents which certify that they were instructed for all their courses in English during their undergraduate or higher degree programs shall be recognized as passing the foreign language test. (2) Take CHM892 or SLA491 Technical Writing in English (This course will be counted as course credit.)		TOEIC	TOEFL (IBT)	TOEFL (CBT)	TOEFL (PBT)	IELTS	OPIC	TEPS	G-TELP (Level 2)	G-TELP (Level 3)	TOEIC (S&W)	800	80	213	550	5.5	IH	309	67	89	270
TOEIC	TOEFL (IBT)	TOEFL (CBT)	TOEFL (PBT)	IELTS	OPIC	TEPS	G-TELP (Level 2)	G-TELP (Level 3)	TOEIC (S&W)														
800	80	213	550	5.5	IH	309	67	89	270														

School of Business Administration Major: Management Engineering

Course	Master's	Doctoral	Combined Master's Doctoral
Credit	At least 28	At least 60	At least 60
Mandatory course	At least course credit: 15, research credit: 4	At least course credit: 12, research credit: 14	At least course credit: 21, research credit: 18
Publication		<p>At least one paper accepted for publication in an SCI, SSCI or SCI-E journal as the first or corresponding author. Also, the student's dissertation advisor needs to be the corresponding or first author.</p> <p>※ The condition that the student's dissertation advisor needs to be the corresponding or first author can be relieved with the consent from the department Graduate Affairs Committee.</p> <p>※ This rule applies to students graduating in the first semester of 2021 or later.</p>	

- The above rule for credits applies to students admitted in or after 2021.

6. Q.E. Guidelines by Department(School) and major
학과(부) 및 전공별 박사자격시험 지침

Department of Mechanical Engineering
Major: Mechanical Engineering

When	May, November (In the week of the third quarter of each semester)																													
Times per Year	Twice per year																													
Criteria	A. Written B. Coursework																													
Subjects	<p>A. Written</p> <p><u>Choose 3 out of 9 subject areas:</u></p> <table border="0"> <tr> <td>✓ Engineering Math (MTH)</td> <td>✓ Fluid Mechanics (FLM)</td> </tr> <tr> <td>✓ Thermodynamics (THD)</td> <td>✓ Heat Transfer (HT)</td> </tr> <tr> <td>✓ Mechanics of Materials (MM)</td> <td>✓ Manufacturing (MFG)</td> </tr> <tr> <td>✓ Dynamics (DYN)</td> <td>✓ Control (CTR)</td> </tr> <tr> <td>✓ Bio&MEMs (BM)</td> <td></td> </tr> </table> <p>Committees for each subject area are formed to write exam problems and grade the answers of applicants. Each committee consists of at least three faculty members.</p> <p>B. Coursework</p> <p>A score of A0 or higher in the listed substitution subject can be accepted instead of taking the qualifying exam.</p>		✓ Engineering Math (MTH)	✓ Fluid Mechanics (FLM)	✓ Thermodynamics (THD)	✓ Heat Transfer (HT)	✓ Mechanics of Materials (MM)	✓ Manufacturing (MFG)	✓ Dynamics (DYN)	✓ Control (CTR)	✓ Bio&MEMs (BM)																			
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✓ Dynamics (DYN)	✓ Control (CTR)																													
✓ Bio&MEMs (BM)																														
	<table border="1"> <tr> <td rowspan="2">Engineering Math (MTH)</td> <td>MEN502 Advanced Mechanical Engineering Analysis</td> <td rowspan="2">Choose 1</td> </tr> <tr> <td>MEN7XX Special Topics (Advanced Mathematics)*</td> </tr> <tr> <td>Thermodynamics (THD)</td> <td>MEN510 Advanced Thermodynamics</td> <td></td> </tr> <tr> <td>Mechanics of Materials (MM)</td> <td>MEN530 Advanced Solid Mechanics</td> <td></td> </tr> <tr> <td>Dynamics (DYN)</td> <td>MEN570 Advanced Dynamics</td> <td></td> </tr> <tr> <td>Fluid Mechanics (FLM)</td> <td>MEN520 Advanced Fluid Mechanics</td> <td></td> </tr> <tr> <td>Heat Transfer (HT)</td> <td>MEN511 Advanced Heat Transfer</td> <td></td> </tr> <tr> <td>Manufacturing (MFG)</td> <td>MEN552 Manufacturing Processes and Systems</td> <td></td> </tr> <tr> <td>Control (CTR)</td> <td>MEN573 Advanced Control Systems I</td> <td></td> </tr> <tr> <td rowspan="2">Bio&MEMS (BM)</td> <td>MEN540 Advanced MEMS</td> <td rowspan="2">Choose 1</td> </tr> <tr> <td>MEN541 Bio MEMS</td> </tr> </table>	Engineering Math (MTH)	MEN502 Advanced Mechanical Engineering Analysis	Choose 1	MEN7XX Special Topics (Advanced Mathematics)*	Thermodynamics (THD)	MEN510 Advanced Thermodynamics		Mechanics of Materials (MM)	MEN530 Advanced Solid Mechanics		Dynamics (DYN)	MEN570 Advanced Dynamics		Fluid Mechanics (FLM)	MEN520 Advanced Fluid Mechanics		Heat Transfer (HT)	MEN511 Advanced Heat Transfer		Manufacturing (MFG)	MEN552 Manufacturing Processes and Systems		Control (CTR)	MEN573 Advanced Control Systems I		Bio&MEMS (BM)	MEN540 Advanced MEMS	Choose 1	MEN541 Bio MEMS
Engineering Math (MTH)	MEN502 Advanced Mechanical Engineering Analysis		Choose 1																											
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Bio&MEMS (BM)	MEN540 Advanced MEMS	Choose 1																												
	MEN541 Bio MEMS																													

Department of Mechanical Engineering

Major: Mechanical Engineering

	* In case of a special topics course it will be accepted depending on the subtitle. MEN795 Special Topics V (Advanced Mathematics) opened in 2019-1 can be accepted according to the subtitle of the course.
Required Time	A. Written 2 hours for each subject area
Passing Standard	Knowledge and understanding of each subject is graded on pass/fail basis. Students must pass 3 subjects from the exam areas.
Measures on Unsuccessful Students	The student may take one more examination if he/she fails in the first examination. Students not passing the Ph.D. Q.E. at the first sitting may be allowed to take the examination one more time for the one or more area exams that were failed (as long as the students are within the allowed duration). In retaking the qualifying exam, students may choose to be tested in a different area, in which case only one chance is allowed. If the student fails again after retaking the exam, the final pass or fail decision will be made by evaluating student's overall research performance in the Q.E. committee meeting.
Appealing Period	One week from the result notification. * During the period above, you can make an objection to your result by submitting the related document. If you're justified, correction can be made by Q.E. committees.
Standard for Application	Students must be registered for the semester in which they take the Ph.D. Q.E. and have full graduate standing. Students must pass the Ph.D. Q.E. within the 6 th semester after enrolling in the Ph.D. or M.S.-Ph.D. program.
Note	The guideline applies to all Ph.D. and M.S.-Ph.D. students.

Department of Civil, Urban, Earth, and Environmental Engineering Engineering

○ Concentration

- ESE: Environmental Science and Engineering - UIE: Urban Infrastructure Engineering
- DME: Disaster Management Engineering - WEN: Water-Energy Nexus

When	June / December
Times per Year	Two times / year
Q.E. Committee	<ul style="list-style-type: none"> - Q.E. committee members should be comprised of two or more professors <li style="padding-left: 20px;">*Academic advisor and professor(s) who taught the Q.E. subjects <li style="padding-left: 20px;">*The academic advisor may not be included in the committee only with the advisor's confirmation. (Only if it is inevitable) - Other professors may be added if necessary
Q.E. Subjects	<ul style="list-style-type: none"> - Students must choose three subjects* from the courses they took during the graduate program. <li style="padding-left: 20px;">* Only subjects with confirmed grades are available - All Q.E. subjects should be approved by Q.E. committee - Undergraduate subjects taken during the graduate program are available - Students can apply for up to two subjects taught by the same professor
Pass criterion	Students must score 70 or higher(out of 100) in each subject to pass
Q.E. Application	<ul style="list-style-type: none"> - Students are allowed to apply for Q.E. after completing two semesters. (After two semesters' grades are confirmed) - Students are allowed to apply for Q.E. two times in total. (If they fail the second Q.E., the qualification for the doctorate is lost)
Note	<ul style="list-style-type: none"> - Test type(Written or Oral) and time are determined by the Q.E. committee - Both 'Ph.D' and 'Combined Master's & Ph.D' students have to PASS the Q.E within 6 semesters of admission - This guideline is effective since 10th October 2015 and it applies to all Ph.D. and Combined Master's and Ph.D. program students students who entered from 2015.

**Graduate School of Semiconductor Materials
and Devices Engineering**
Major: Semiconductor Materials and Devices Engineering

When	Qualifying exam can be taken twice a year, once per semester.(Spring and Fall.)
Criteria	Oral Examination
Subjects	<ul style="list-style-type: none"> • The committee consists of three professors from UNIST including the student's academic advisor, who is the committee chair, and two other decided by the graduate school committee of our department/school. The academic advisor can suggest committee candidates. At least two of three committee professors should be the core members from the graduate school of semiconductor materials and devices engineering. • The students must turn in the examination materials to all committee professors at least 1 week prior to the examination date. Otherwise the student will be considered to have failed in the examination. • The presentation should focus mainly on the student's research background and the subsequent questions from the committed should be answered properly. The committee will make a decision right after discussion in the examination.
Required Time	Presentation and Oral Examination : 60min.
Passing Standard	Knowledge and understanding of major subjects for the Ph.D. research (60points), presentation ability and attitude (10 points) and presentation contents (30 points)
Measures on Unsuccessful Students	The student must earn at least 60 points from each committee professor to pass the examination. The student may take one more examination if he/she fails in the first examination. However, the student cannot take QE twice within one semester.
Standard for Application	Students must pass the Ph.D. qualifying exam within 6th semester after enrolling in the Ph.D./M.S-Ph.D. course.
Note	

Department of Materials Science and Engineering

Major: Materials Science and Engineering

When	Qualifying exam can be taken twice a year, once per semester(Spring and Fall).
Criteria	Oral Examination
Subjects	<p>. The committee consists of three professors from UNIST including the student's academic advisor, who is committee chair, and two other decided by the graduate school committee of our department/school. The academic advisor can suggest committee candidates.</p> <p>. The students must turn in the examination materials to all committee professors at least 1 week prior to the examination date. Otherwise the student will be considered to have failed in the examination.</p> <p>. The presentation should focus mainly on the student's research background and the subsequent questions from the committed should be answered properly. The committee will make a decision right after discussion in the examination.</p>
Required Time	Presentation and Oral Examination: 60min
Passing Standard	Knowledge and understanding of major subjects for the Ph. D. research(60 points), presentation ability and attitude(10 points) and presentation contents(30 points)
Measures on Unsuccessful Students	The student must earn at least 60 points from each committee professor to pass the examination. The student may take one more examination if he/she fails in the first examination. However, the student cannot take QE twice within one semester.
Standard for Application	Students must pass the Ph. D. Q.E. within 6th semester after enrolling in the Ph. D./M.S-Ph. D. course
Note	

School of Energy and Chemical Engineering
Major: Energy Engineering, Energy Engineering(Battery Science and Technology), Chemical Engineering

Period	The Qualifying Exam (Q.E) is twice a year, normally in June and December (It can be rescheduled if needed)
Oral Test (2019~)	<ol style="list-style-type: none"> 1. Subject: Students who entered 2019 and onwards 2. Deadline: Students must take Q.E within 2 years (4th semester) from their admission 3. Format: Oral Q.E. can be conducted with the format of pre-defense. <ul style="list-style-type: none"> * Oral Q.E. will substitute the Pre-Defense 4. Exam time: Presentation of research plan (15-20 minutes) and Q&A (30 minutes) 5. Result <ol style="list-style-type: none"> a) Pass 1) the average of 3 committee members' score is over 70 (including 70), and 2) No "F" among 3 evaluation categories b) Fail: 1) the average of 3 committee members' score is below 70 (from 69), or 2) any "F" among 3 evaluation categories <ul style="list-style-type: none"> * Those who failed to pass the 1st Oral Q.E. are required to take another Q.E. on their 5th Semester. Failure of the 2nd Q.E. will lead to Master's graduation or completion of Doctoral Courses (Degree will not be conferred) 6. Composition of committee members (applied from Q.E. in 2024-1st semester) <ol style="list-style-type: none"> a) 1st Q.E: 3 members excluding the academic advisor b) 2nd Q.E: 3 members excluding the academic advisor <ul style="list-style-type: none"> * The composition of committee members should be discussed between the applicant and the academic advisor
Evaluation of Oral Q.E.	<p>A. Basic knowledge of Research (30%)</p> <ol style="list-style-type: none"> 1) Does the student fully understand the scientific background and relevant disciplines of the research area(s)? 2) In the specific research topic, does the student understand the importance of the work on the aspects of science and practical applications? <ul style="list-style-type: none"> Does the student understand domestic and international trends of the topic, in the past, present and future? Does the student follow and understand the efforts of major competitors? <p>B. Research goal and contents, ability to conduct research (40%)</p> <ol style="list-style-type: none"> 1) Did the student properly establish and clearly suggest the objectives and scope of the research? <ul style="list-style-type: none"> (Objectives and scope-based on proper hypotheses?; Scope- sufficient to achieve the goals?; Risk and/or limit of established goals/scope - manageable?) 2) Does the student fully understand the methodologies and skills essential to carry out the research work? 3) Does the main idea(s) of the proposal include student's own input and show his/her creativity, in addition to the ones from his/her advisor(s)? 4) Does the student have a strategic plan to efficiently conduct the research, such as collaboration and use of important resources, inside as well as outside the UNIST campus? <p>3. Presentation Skill (30%)</p> <ol style="list-style-type: none"> 1) Is the presentation material well-prepared? <ul style="list-style-type: none"> (Good at the preparation of presentation material?) 2) Does the student deliver the proposal logically and clearly? (Presentation ability and

	<p>skills in English?)</p> <p>3) Does the student clearly understand and properly answer the questions raised by committee members?</p>
Miscellaneous	<p>※ These Guidelines are effective from the 2023 Spring semester.</p> <p>※ Research proposal</p> <ul style="list-style-type: none"> - Students who entered before 2019 should submit the research proposal 1 year prior to the expected dissertation defense. After passing the Q.E. and submitting the research proposal, the proposal defense must be completed at least 6 months before the dissertation defense - Students who entered after 2019 should submit the research proposal within 2 years of the entrance. <p>* Research proposals are only accepted as official documents during the application term of each semester defense.</p>
Note	The rules apply to all 3 majors in the school of Energy and Chemical Engineering

Department of Nuclear Engineering

Major: Nuclear Engineering

When	May, November (In the week of the third quarter of each semester)		
Times per Year	Twice per year		
Criteria	Written		
Subjects	<p>Choose 3 out of 10 subjects:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <ul style="list-style-type: none"> ✓ Nuclear Reactor Theory ✓ Nuclear Thermal Hydraulics ✓ Radiation Science ✓ Probabilistic Safety Assessment ✓ Nuclear Fusion </td> <td style="width: 50%; vertical-align: top;"> <ul style="list-style-type: none"> ✓ Nuclear safety ✓ Nuclear Fuel and Fuel Cycle ✓ Nuclear Materials Engineering ✓ Magnetohydrodynamics ✓ Medical Imaging & AI </td> </tr> </table>	<ul style="list-style-type: none"> ✓ Nuclear Reactor Theory ✓ Nuclear Thermal Hydraulics ✓ Radiation Science ✓ Probabilistic Safety Assessment ✓ Nuclear Fusion 	<ul style="list-style-type: none"> ✓ Nuclear safety ✓ Nuclear Fuel and Fuel Cycle ✓ Nuclear Materials Engineering ✓ Magnetohydrodynamics ✓ Medical Imaging & AI
<ul style="list-style-type: none"> ✓ Nuclear Reactor Theory ✓ Nuclear Thermal Hydraulics ✓ Radiation Science ✓ Probabilistic Safety Assessment ✓ Nuclear Fusion 	<ul style="list-style-type: none"> ✓ Nuclear safety ✓ Nuclear Fuel and Fuel Cycle ✓ Nuclear Materials Engineering ✓ Magnetohydrodynamics ✓ Medical Imaging & AI 		
Required Time	4 hours for written (1 hour-ish per each subject)		
Passing Standard	Average over 60% for pass; if any of the subject score is less than 40%, then fail. For the subject which is taken second will be considered as final score for total.		
Measures on Unsuccessful Students	<p>Students can retake Q.E. until they pass.</p> <p>* In case of a retake, there is no restriction on the choice of subject.</p>		
Appealing Period	<p>One week from the result notification.</p> <p>* During the period above, you can make an objection to your result. If you're justified, correction can be made by Q.E. committees.</p>		
Standard for Application	<p>Doctoral Program/Combined Master's-Doctoral Program:</p> <p>Students must pass the Ph.D Q.E. within 6 semesters after enrolling in the Ph.D/M.S-Ph.D Course.</p>		
Required Documents	Application form for Q.E. with selection of subjects.		
Note			

**Graduate School of Carbon Neutrality
Carbon Neutrality(Energy Engineering),
Carbon Neutrality(Chemical Engineering),
Carbon Neutrality(Environment)**

When	<p>The qualifying exam (QE) can be taken twice a year, once per semester (Spring and Fall).</p> <p>The specific date may be determined by the applicant in consultation with his/her QE committee. The QE deadline aligns with the last day of each semester.</p> <p>Students are recommended to take their first QE during the 4th semester.</p>
Criteria	<p>Presentation and Oral Examination</p> <p>(Upon successful completion of the QE, students are required to apply for both the pre-defense and final defense as part of the graduation process.)</p>
Subjects	<p>Students should primarily focus on presenting their research background and properly answer any subsequent questions from the committee.</p>
Required Time	<p>15 minutes of presentation + 30 minutes of Q&A</p>
Composition of committee	<p>3 members including the academic advisor</p> <p>The composition of committee members should be determined through discussion between the applicant and the academic advisor.</p>
Passing Standard	<p>Above 70 out of 100 (including 70) from each committee member</p> <p>- Evaluation Criteria: Basic knowledge and understanding (50) + Presentation contents (30) + Presentation ability and attitude (20)</p>
Measures on Unsuccessful Students	<p>Those who failed the first QE are allowed to take 1 more QE.</p> <p>(Students cannot take QE twice within 1 semester.)</p>
Standard for Application	<p>Both Ph.D and MS-Ph.D students must pass the QE by the end of their 6th semester.</p>
Note	<p>These guidelines are effective from entrants from the academic year 2022 onward.</p>

Department of Design

Major: Design

When	June / December
Times per Year	Twice per year
Criteria	<ul style="list-style-type: none"> ■ Oral exam <ul style="list-style-type: none"> - Determined by 3 faculties of Design (preferable faculty for Q.E. can be recommended by each applicant and his/her supervisor). ■ Q.E. Objectives: <ul style="list-style-type: none"> - Clearly defining a research topic and focus. - Selecting, reading, critiquing, and discussing key research literature in the selected area. - Conducting and presenting limited initial work on a project pertinent to the selected area. <p>In order to achieve these objectives, the Q.E. is explicitly focused on the student's research work and activity rather than examining their knowledge of coursework (e.g., a written exam) or assessing their potential (e.g., by presenting a prior project in detail).</p>
Type	<p>Option ① In-depth literature review covering 4-8 articles from chosen research topic to demonstrate knowledge of research specialization.</p> <p>Option ② Research project, including motivations, research questions, methods, outcomes and discussion.</p>
Time	<ul style="list-style-type: none"> ■ The Q.E. includes a presentation (15-20 mins) consisting of: <ul style="list-style-type: none"> - A summary and synthesis of the research articles, describing major topics, themes, and issues in the research area. - A project presentation detailing (preliminary) project work to date. ■ The Q.E. includes a Q&A (40-45 minutes) including: <ul style="list-style-type: none"> - A student's knowledge of the research papers and, more generally, the research area they are studying. - A critique and discussion of their project work.
Measures on Unsuccessful Students	<ul style="list-style-type: none"> ■ Applicants who do not qualify for exemption and fail the first oral exam must pass the oral at the second attempt. ■ An applicant who fails the oral exam for the second time are not allowed to continue in the Ph.D. program. ■ Poor knowledge of the research area (as demonstrated through presentation or Q&A) ■ Inadequate project work. ■ The Q.E. must be passed by the end of the 6th semester – following UNIST regulation.
Standard for Application	<ul style="list-style-type: none"> ■ Each applicant must have earned at least 12 course credits from his/her concentration area before applying for the Q.E. ■ Min GPA of 3.5. ■ Each applicant should submit a Q.E. application form to the department by May 1st (for June Q.E.) or Nov 1st (for December Q.E.). ■ Students must pass the Q.E. within 3 years after enrolling in the Ph.D. program. ■ The application can be rejected if the supervisor or committee deems the student to be unprepared - E.g., inappropriate research articles selected, insufficient project work completed.
Exemption	<p>In the case of students transferring from another major, the Q.E. must be passed by the end of the third semester in the new major; following UNIST regulation.</p>

※ *This guideline is applied to students entering from Spring Semester, 2024.*

Department of Biomedical Engineering

Major: Biomedical Engineering

When	June, December
Times per Year	Twice per year
Criteria	Oral exam
Subjects	<p>The student determines one of the two exam options under the advisor's supervision;</p> <p>Option #1: Presentation of an in-depth literature review of 4 to 8 articles in a relevant research topic to demonstrate the expertise and the research capability. The articles chosen should be approved by the advisor. The presentation should include the student's research proposal for the doctoral study based on the literature review.</p> <p>Option #2: Presentation of a past or current research work that the applicant has conducted during his/her graduate program. The presentation should include the student's research proposal for the doctoral study based on the past or current project.</p>
Required Time	30-minute presentation + up to 1 hour of Q/A
Passing Standard	<p>Determined by 3 faculty members of BME who are nominated by BME Graduate Study Committee (preferable thesis committee members for Q.E. can be recommended by each applicant).</p> <p>Students are required to pass the Q.E. within 2 years after the enrollment.</p>
Note	An applicant who fails the oral exam within 2 years after the enrollment is not allowed to continue in the Ph.D. or M.S-Ph.D. program. However, if the applicant has fulfilled the requirement obtaining for a M.S. degree, she/he can leave the program after receiving an M.S. degree once they complete a M.S. thesis defense within 5 semesters after the enrollment.

Department of Industrial Engineering

Major: Industrial Engineering

When	June, December
Times per Year	Twice a year
How	<ol style="list-style-type: none"> 1. The student should specify a faculty member affiliated with Department of Industrial Engineering (IE) as his/her dissertation advisor with the agreement from the faculty member. 2. Qualifying Examination (QE) is administered by the IE QE committee. 3. QE committee is composed of at least three members including the student's dissertation advisor, affiliated with UNIST. QE committee may have additional committee member(s) outside UNIST with the consent of the student and her/his dissertation advisor. All the members of the QE committee are appointed by the Dean of IE. <ol style="list-style-type: none"> 1) Document evaluation <ul style="list-style-type: none"> <input type="radio"/> Academic achievement in MS <ul style="list-style-type: none"> <input type="checkbox"/> GPA <input type="radio"/> Dissertation proposal plan <ul style="list-style-type: none"> <input type="checkbox"/> Form: (1) Title (2) Background (Introduction) (3) Objectives (Goals) (4) Research Time Plan (5) Work performed (6) Future work (7) References <input type="checkbox"/> The plan should be written in English within 5 pages. <input type="radio"/> Other research ability <ul style="list-style-type: none"> <input type="checkbox"/> The number of publications, ongoing work, etc. 2) Paper presentation <ul style="list-style-type: none"> <input type="radio"/> The student will give a presentation on a paper. <ul style="list-style-type: none"> <input type="checkbox"/> A list of papers will be selected and announced by the QE committee at least two weeks in advance. <input type="checkbox"/> The papers selected were published in major journals related to Industrial Engineering (see Subjects). <input type="checkbox"/> The student selects one of the papers (or both) and review it (them). <input type="checkbox"/> The student is encouraged to reproduce and transform experiments in the paper if possible. <input type="checkbox"/> Assessment is based on predefined evaluation criteria to see how well the overall content and details of the paper(s) are (1) understood, (2) delivered in the presentation, and (3) implemented or reproduced.
Fields of Study	<p>Detailed fields of study</p> <ul style="list-style-type: none"> o Statistical Learning o Data Mining/Machine Learning o Process Mining o Financial Engineering o Operations Management o Operation Research o Technology Management o Quality Control o Service Science o Business Process Management
Required Time	Determined by QE committee

Passing Standard	70 points or higher in the overall score.
Measures on Unsuccessful Students	<p>If the student does not pass the QE, he/she has a chance to re-take it only once within one year. If the student applies for QE at the end of the third year in his/her program, the student cannot have a chance to re-take QE.</p> <p>If a student does not pass QE within 3 years after the registration, he/she will be terminated from the PhD or the MS-PhD program. This decision may be appealed by the student. Appeals are managed on a case-by-case basis by the QE committee.</p>
Standard for QE Application	<p>To apply for taking QE, the student should earn required course credits (for PhD or MS-PhD program) specified in the section of 'Degree Requirement by Industrial Engineering' in the UNIST Graduate Program Handbook.</p> <ul style="list-style-type: none"> - Students who have taken at least two semesters and completed at least 15 credits can apply for the QE - Students who are in the second semester and have completed 15 credits in the first semester also can apply for the QE <p>All PhD or MS-PhD students must take QE within 3 years after having registered the program.</p>
Note	Effective date for this guideline is Spring 2020. It applies to all PhD and MS-PhD students who take QE from then onward.

Department of Biological Sciences

Major: Biological Sciences

Examination Schedule	<ul style="list-style-type: none"> • Every May or November • Applicable from the 3rd semester • Should pass the QE within six semesters of the PhD or MSc-PhD program
Criteria	<ul style="list-style-type: none"> • Thesis research proposal (12 pages) <ol style="list-style-type: none"> 1) Specific aims (1 page) 2) Background and significance (3 pages) 3) Preliminary results (3 pages) 4) Research plan (5 pages) 5) References • Oral Presentation (30 min + 30 min Q/A) • Scored by the QE evaluation index
QE committee	<ul style="list-style-type: none"> • Three faculty members including one committee chair, but excluding the thesis advisor. If necessary, external reviewers can be invited • The applicant's thesis advisor should organize the QE committee; the QE committee will discuss with the thesis advisor to finalize the QE evaluation report
timeline	<ul style="list-style-type: none"> • The QE committee should submit the QE evaluation report to the Graduate Affairs Committee by the end of May or November • Graduate Affairs Committee should deliberate the QE evaluation reports and inform each candidate of the QE result by the end of June or December
Measures on Unsuccessful Students	<p>Disqualified if the final grade is "Fail"; disqualified students can apply for a second exam in the next semester or there after; maximum of two attempts are allowed</p>
Note	<p>This guideline is effective for new graduate students in 2022 and afterward.</p>

Graduate School of Artificial Intelligence

Major: Artificial Intelligence

When	June / December								
Times per Year	twice / year								
Criteria	Coursework								
Subjects	<ul style="list-style-type: none"> ■ Students must pass all courses from a Q.E. course group. <p>A Q.E. course group can consist of four or five courses and it can be formed by one of the following two methods:</p> <ul style="list-style-type: none"> ● Method 1: any of the four courses that satisfy the following conditions: <ul style="list-style-type: none"> ✓ At least one course should be one of two required courses, AI502 Principles of Deep Learning and AI503 AI Toolkits; ✓ The remaining three Q.E. courses should be selected from at least two course tracks given below; <table border="1" style="width: 100%; border-collapse: collapse; margin: 10px 0;"> <thead> <tr> <th style="text-align: center;">Track</th> <th style="text-align: center;">Course Code</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">AI core</td> <td style="text-align: center;">AI502 / AI503 / AI51X / AI52X / AI7XX</td> </tr> <tr> <td style="text-align: center;">AI + X</td> <td style="text-align: center;">AI53X / AI54X</td> </tr> <tr> <td style="text-align: center;">AI systems</td> <td style="text-align: center;">AI55X / AI56X</td> </tr> </tbody> </table> <ul style="list-style-type: none"> ● Method 2: any of the five courses that satisfy the following conditions: <ul style="list-style-type: none"> ✓ At least one course should be one of two required courses, AI502 Principles of Deep Learning and AI503 AI Toolkits; ✓ The remaining four Q.E. courses should be selected from AI core, AI+X, and AI systems track courses (AI502 / AI503 / AI51X / AI52X / AI7XX / AI53X / AI54X / AI55X / AI56X). <ul style="list-style-type: none"> ■ Courses taken during UNIST Master program satisfying the above requirements can be included in Q.E. courses. 	Track	Course Code	AI core	AI502 / AI503 / AI51X / AI52X / AI7XX	AI + X	AI53X / AI54X	AI systems	AI55X / AI56X
Track	Course Code								
AI core	AI502 / AI503 / AI51X / AI52X / AI7XX								
AI + X	AI53X / AI54X								
AI systems	AI55X / AI56X								
Required Time	N/A								
Passing Standard	Students must pass all courses from a QE course group. To pass a QE course, a student should achieve grade B+ or higher.								
Measures on Unsuccessful Students	Students who fail to pass all Q.E. courses within the allowed duration will be terminated from the Ph.D. / MS-Ph.D. program.								
Appealing Period	N/A								
Standard for Application	Allowed duration: Students must pass the Q.E. within 3 years after enrolling in the Ph.D. / MS-Ph.D. program.								
Note	This guideline will also be adapted to the students who've entered before Fall 2022.								

Graduate School of Health Science and Technology

Major: Health Science and Technology

When	From March / From September
Times/Year	Two times/year
Criteria	Oral exam
Contents	<p>The student determines one of the two exam options under the advisor's supervision;</p> <ul style="list-style-type: none"> • Option #1: Presentation of an in-depth literature review of 4 to 8 articles from a chosen research topic to demonstrate knowledge of research specialization. The articles should be approved by the advisor. The presentation should include the student's research proposal based on the literature review. • Option #2: Presentation of a past or current research work that the applicant has conducted during his/her graduate program. The presentation should include the student's research proposal based on the past or current project.
Time	30 minutes presentation + up to 1 hour of Q/A
Passing Standard	Determined by 3 faculties of HST who are selected by HST Graduate Committee (preferable faculty for Q.E. can be recommended by each applicant). Students are required to pass the Q.E. within 2 years into the program.
Note	An applicant who fails the oral exam within 2 years into the program is not allowed to continue in the Ph.D. program. However, if the applicant fulfills the requirements for the M.S. degree, she/he can leave with an M.S. degree after M.S. thesis defense within 5 semesters into the program.

Department of Electrical Engineering

Major: Electrical Engineering

When	June / December
Times per Year	twice / year
Criteria	Coursework (When failed, written test)
Passing Standard for QE	<p>1. A student passes the QE if he/she receives A- or higher for three 500 level graduate courses. Note that this is the grade in each individual course, not the average.</p> <ul style="list-style-type: none"> ▪ If a student fails to satisfy the above condition 1, then he/she must take a written QE on three 500 level EE graduate courses. Courses in which the student received an A- or higher will be waived (counted as passing that course) for the student. <p>* Courses taken during UNIST Master program satisfying the above requirements can be considered QE courses.</p> <p>* In special cases, the department committee may also decide the passing of the QE through discussion.</p> <p>* For the Phd program entrants from other universities, at most, up to two courses taken at another university can be recognized as the credit of the similar 500-level classes for QE.</p> <p>* The above condition applies to 2024 year entrants(and after).</p>
Required Time for Written Exam	To be determined by individual professor in charge of each course exam.
Passing Standard for Written Exam	<ul style="list-style-type: none"> ▪ Students must receive scores greater than or equal to 60 (out of 100) for each course in order to pass an exam.
Measures on Unsuccessful Students	<ul style="list-style-type: none"> ▪ Students who fail to pass QE within the six enrolled semesters must leave the Ph.D or combined M.S-Ph.D program. ▪ Students not passing the written QE at the first attempt may be allowed to take the exam one more time. However, they cannot take the QE twice within one semester. ▪ <u>When taking the QE again, students may choose different subjects next time.</u>
Standard for Application	<ul style="list-style-type: none"> ▪ Students must be registered for the semester in which they take the QE. ▪ Students who are taking the exam at the second attempt get waiver for courses <u>passed previously.</u>
Note	<ul style="list-style-type: none"> ▪ Appeal process (for the written QE): <ul style="list-style-type: none"> - Students have the right to dispute the outcome of the exam. - Appeals, to be made on an individual subject basis, must be made in writing and must be submitted to the QE coordinator within 3 business days after the announcement of the outcome. ▪ Response to appeals is to be processed in the following manner: <ul style="list-style-type: none"> - The written appeal will be processed by the professor in charge of the subject within 3 business days of submission of appeal. - The professor in charge will consider the appeal and may take the following actions. <ol style="list-style-type: none"> 1) Dismiss the appeal, 2) Re-evaluate the submitted answers, possibly resulting in changes in the score, 3) Recommend re-taking of the exam to the QE coordinator.

The professor in charge must submit a report on the reasons behind the decision. In case of 3), the QE coordinator will initiate a due process to re-take the exam and the exam must be re-taken within 3 business days of the decision to re-take the exam.

In this case, this re-take will not be considered as a second attempt at the QE (as designated in the "Measures on Unsuccessful Students" section).

- The outcome of the appeal process will be final. No further appeals will be allowed.

- These guidelines are applied to students entering the graduate program for Ph.D or combined M.S-Ph.D (not M.S) from the first semester in 2017, which means it will not be applied retroactively.
- Only UNIST graduate courses are valid for the QE.
- The QE results must be reported within one month after the exam to the admin office.

Department of Computer Science and Engineering

Major: Computer Science and Engineering

When	June / December
Times per Year	twice / year
Criteria	<p>A. Coursework (mandatory)</p> <p>B. Written Exam</p> <ul style="list-style-type: none"> ○ Only if the student fails to pass the Q.E. according to the A. Coursework guidelines.
Subjects	<p>A. Coursework</p> <ul style="list-style-type: none"> ○ Students must take at least four core courses including at least one core course from each subtrack. ○ Core course list <ol style="list-style-type: none"> 1. Systems subtrack <ul style="list-style-type: none"> • CSE511 Advanced computer architecture • CSE514 Advanced operating systems • CSE516 Advanced compilers • CSE539 Advanced computer networks (or EE538 Data Communication Networks*) ※ Taking both CSE539 and EE538 is allowed. However, only one of the two courses taken can be used for the Q.E. purpose coursework. • CSE551 Advanced computer security 2. Theory and principles of software subtrack <ul style="list-style-type: none"> • CSE515 Advanced Algorithms ※ If a student has already taken "CSE515 Algorithm Design", the student can use it for the Q.E. purpose. • CSE520 Computational Geometry • CSE524 Advanced Software Engineering ※ If a student has already taken "CSE524 Software Engineering", the student can use it for the Q.E. purpose. ※ For students who entered the graduate program before Fall 2020, "CSE520 Computational Geometry" and "CSE530 Algorithms and complexity" can be used for the Q.E. purpose. • CSE552 Program Analysis 3. Artificial intelligence and data science subtrack <ul style="list-style-type: none"> • CSE522 Advanced Information Visualization ※ If a student has already taken "CSE522 Data Visualization", the student can use it for the Q.E. purpose. • CSE523 Advanced Human Computer Interaction • CSE544 Advanced Machine Learning • CSE529 Autonomous Robots • CSE545 Advanced Computer Vision • CSE554 Advanced Data Mining

	<ul style="list-style-type: none"> ○ The above core course list is subject to change on a yearly basis based on the review and recommendation of the CSE academic affairs committee. ○ Courses taken during UNIST Master program satisfying the above requirements can be considered Q.E. courses. <p>B. Written Exam</p> <ul style="list-style-type: none"> ○ Students may take as many as 4 courses for the written exam as follows: <ol style="list-style-type: none"> 1. Required (Major research area): 2 courses <ul style="list-style-type: none"> • 2 courses should be chosen from the core course list of the subtrack to which the student belongs. 2. Selective: 2 courses from the core course lists of the other subtracks.
Required Time for Written Exam	To be determined by individual professor in charge of each course exam.
Passing Standard	<ul style="list-style-type: none"> <input type="checkbox"/> Passing the Q.E.: The student must pass a total of 4 courses selected (through both A. Coursework and B. Written Exam) to pass the Q.E. <p>A. Coursework</p> <ul style="list-style-type: none"> ○ The student will be considered to have passed the 4 courses if the average GPA of the 4 courses selected is A- or higher, under the condition that the grades of all 4 courses are B- or higher. ○ If the average GPA of the student does not meet the above criteria, then Pass/Fail will be determined on an individual course basis, and courses with grades A- or higher grade will be considered pass. For the failed courses, written exams must be taken under the guideline of B. Written Exam. <p>B. Written Exam</p> <ul style="list-style-type: none"> ○ Exam is graded on Pass/Fail basis and taken on an individual course basis. ○ Courses passed through A. Coursework will be considered to be part of the Subject selection criteria and must be excluded from selection. Hence, the number of courses the student will take is 4 minus the number of passed courses through A. Coursework. ○ Students must receive scores greater than or equal to 60 (out of 100) for each course in order to pass each course exam.
Measures on Unsuccessful Students	<ul style="list-style-type: none"> <input type="checkbox"/> Students who fail to pass the Q.E. within the allowed duration will be terminated from the Ph.D / MS-Ph.D program. <input type="checkbox"/> Students will be given one attempt to pass the B. Written Exam upon failure of A. Coursework.
Standard for Application	<ul style="list-style-type: none"> <input type="checkbox"/> Allowed duration: Students must pass the Q.E. within 3 years after enrolling in the Ph.D / MS-Ph.D program. <input type="checkbox"/> Students must be registered for the semester and have full graduate standing in order to take the B. Written Exam.
Note	<ul style="list-style-type: none"> <input type="checkbox"/> In case B. Written Exam is taken, the Q.E. results must be publically announced within two weeks after the exam.

- Appeal process (for B. Written Exam)
 - Students have the right to dispute the outcome of the exam.
 - Appeals, to be made on an individual course basis, must be made in writing and must be submitted to the Q.E coordinator within 3 business days after the announcement of the outcome.
- Response to appeals is to be processed in the following manner:
 - The written appeal will be processed by the professor in charge of the subject within 3 business days of submission of appeal.
 - The professor in charge will consider the appeal and may take the following actions.
 - (1) Dismiss the appeal,
 - (2) Re-evaluate the submitted answers, possibly resulting in changes in the score,
 - (3) Recommend re-taking of the exam to the Q.E coordinator.

The professor in charge must submit a report on the reasons behind the decision.

In case of 3), the Q.E coordinator will initiate a due process to re-take the exam and the exam must be re-taken within 3 business days of the decision to re-take the exam.

In this case, this re-take will not be considered as a second attempt at the Q.E. (as designated in the "Measures on Unsuccessful Students" section).
 - The outcome of the appeal process will be final. No further appeals will be allowed.
- These guidelines are effective from the first semester of 2017, and apply to the Ph.D. and MS-Ph.D. students only.
- These guidelines are not applicable to students who entered the graduate program before 2017.

Department of Physics

Major: Physics

When	<ul style="list-style-type: none"> • Determined by Q.E. Committee
Times per Year	<ul style="list-style-type: none"> • Twice per year (once for each semester)
Criteria	<ul style="list-style-type: none"> • Written Test
Subjects	<ul style="list-style-type: none"> • Classical Mechanics • Electrodynamics • Quantum Mechanics • Statistical Mechanics
Required Time	<ul style="list-style-type: none"> • Determined by Q.E. Committee
Standard for Pass	<ul style="list-style-type: none"> • Determined by Q.E. Committee For each subject, the written exam will be exempt if the student meets the following requirements: • Classical Mechanics A+, A0, A- for Classical Mechanics (PHY501) • Electrodynamics Average 3.7 or above for Electrodynamics I, II (PHY503, PHY504) • Quantum Mechanics Average 3.7 or above for Quantum Mechanics I, II (PHY505, PHY506) • Statistical Mechanics A+, A0, A- for Statistical Mechanics (PHY507)
Measures on Unsuccessful Students	<ul style="list-style-type: none"> • The student may take one more examination if he or she fails in the first attempt.
Standard for Application	<ul style="list-style-type: none"> • Students must pass Q.E. within the 3rd semester after enrolling in the Ph.D. course and the 4th semester in the M.S-Ph.D. course.
Note	

Students who enroll in 2022 should follow the requirements and guidelines written above.

There are two routes to pass the Ph.D. qualification. One is taking a qualifying exam, and the other is a credit pass.

1. Qualifying Exam

- Four core subjects for the written tests: Classical Mechanics, Electrodynamics I, Quantum Mechanics I, Statistical Mechanics
- There are two chances of taking exams. In the first attempt, students should take all the non-credit passed subjects. In the second attempt, students can take only non-passed subjects in the first attempt. If any failed subjects in the first attempt meet the credit pass criterion within one year, those subjects are waived from the exam.
- The Department of Physics requires combined M.S-Ph.D students to take the first exam within one year from the entrance and pass no later than two years from the entrance. The Ph.D. students should take the first exam within one year from the entrance and pass no later than one and a half years from the entrance.

2. Credit Pass

- The students who earn A- or higher for any core subjects are waived from taking qualifying exams for this subject.
- For two-semester courses such as Electrodynamics and Quantum Mechanics, the average score of I and II should be 3.7 (A-) or higher for the credit pass.
- Only subjects for which the A- criterion is met within one year (March-newcomers) or one and a half years (September-newcomers) from the entrance are accepted as the credit pass (applied both to Ph.D. and combined M.S.-Ph.D programs).
- The credit pass criterion is applied automatically. No separate application is required.

In the above regulations, the semester of leave-of-absence is not counted for the required period to take the exam or credit pass.

Exceptional cases from the above regulations (for example, by dispatch to other institutes, etc) should be reviewed and approved by the department graduate committee.

Department of Physics

Major: Applied Physics

When	<ul style="list-style-type: none"> Year-round, but no later than the last day of the week following the final examination week. (Date to be determined by the examination committee) Students must take the first attempt before the end of the fourth semester.
Times per Year	<ul style="list-style-type: none"> Twice per year
Criteria	<ul style="list-style-type: none"> Coursework and Comprehensive Examination
Subjects	<ul style="list-style-type: none"> Coursework: Two core courses and two elective courses Elective courses may be any PHY500-, PHY600-, or PHY700- level courses. Students can take Graduate courses from outside the Department of Physics to fulfill the elective course requirement if relevant to their research topic. Comprehensive Examination: Presentation of a research project (goals, results, and plan) followed by examination (both oral) A written report of ongoing and planned research activities (5 to 7 pages) is to be submitted at least two weeks before the examination date.
Required Time	<ul style="list-style-type: none"> Comprehensive Examination Presentation: 20–30 minutes Examination: To be determined by the committee
Passing Standard	<ul style="list-style-type: none"> Coursework Students must attain an average grade of B (3.0) or higher overall and achieve a grade of B (3.0) or higher in each of the two core courses. Comprehensive Examination Students must pass the comprehensive examination.
Measures on Unsuccessful Students	<ul style="list-style-type: none"> Students should pass the qualifying examination within three years after enrollment.
Required Documents	<ul style="list-style-type: none"> An application form is due in the first month of the desired semester.
Note	<ul style="list-style-type: none"> Students may take the comprehensive examination before or after completion of the required coursework.

Department of Mathematical Sciences

Major: Mathematical Sciences

When	Determined by Q.E Committee
Times per Year	Two times / Year
Criteria	Written
Subjects	Students must choose one of the following three courses for their qualifying exam: Real Analysis, Algebra, and Numerical Analysis and Applications.
Required Time	Determined by Q.E Committee
Passing Standard	Determined by Q.E Committee
Measures on Unsuccessful Students	Students may have one more chance if they fail on the first attempt.
Standard for Application	<p>Students must pass a written exam before their 5th semester starts, and this regulation only applies to doctoral and combined program students.</p> <p>Students who receive an A+ grade in at least one of the subjects (Real Analysis, Algebra, and Numerical Analysis and Applications) or equivalent courses during their undergraduate or graduate program at UNIST, including other universities, can be exempted from the exam upon the department's academic affairs committee's review.</p> <p>Students who transferred from a different department must pass within one year after their transfer. Upon the decision of the department's academic affairs committee, a one-year extension or exemption would be possible.</p>

The requirements above apply to graduate students entering in the 2024 academic year or later. They do not apply retrospectively.

Department of Chemistry

Major: Chemistry

When	<ul style="list-style-type: none"> Year-round, but no later than the last day of the week following the final examination week; date to be determined by the examination committee Students must take the first attempt before the end of the fourth semester.
Times per Year	<ul style="list-style-type: none"> Twice per year
Criteria	<ul style="list-style-type: none"> Coursework and Comprehensive Examination
Subjects	<ul style="list-style-type: none"> Coursework: Two core courses and two elective courses Elective courses may be any CHM500- or CHM600-level courses, except CHM590 and CHM690. Students can take Graduate courses from outside the Department of Chemistry to fulfill the elective course requirement if relevant to their research topic. Comprehensive Examination: Presentation of a research project (goals, results, and plan) followed by examination (both oral) A written report of ongoing and planned research activities (5 to 7 pages) is to be submitted at least two weeks before the examination date.
Required Time	<ul style="list-style-type: none"> Comprehensive Examination Presentation: 20–30 minutes Examination: To be determined by the committee
Passing Standard	<ul style="list-style-type: none"> Coursework Students must attain an average grade of B (3.0) or higher overall and achieve a grade of B (3.0) or higher in each of the two core courses. Comprehensive Examination Students must pass the comprehensive examination.
Measures on Unsuccessful Students	<ul style="list-style-type: none"> Students should pass the qualifying examination within three years after enrollment.
Required Documents	<ul style="list-style-type: none"> An application form due on the first month of the desired semester
Note	<ul style="list-style-type: none"> Students may take the comprehensive examination before or after completion of the required coursework.

School of Business Administration Major: Management Engineering

When	June, December
Times per Year	Twice a year
How	<ol style="list-style-type: none"> 1. The student should specify a faculty member affiliated with School of Business Administration (SBA) or Graduate School of Technology and Innovation Management (MOT) as his/her dissertation advisor with the agreement from the faculty member. 2. Qualifying Examination (QE) is administered by SBA QE committee. 3. QE committee is composed of at least three members including his/her dissertation advisor, affiliated with UNIST. QE committee may have additional committee member(s) outside UNIST with the consent of the student and her/his dissertation advisor. All the members in QE committee will be appointed by the Dean of SBA. 4. The details of QE exam are as follows: <ol style="list-style-type: none"> 4-1) Test on methodology (Research methods, statistics and data analysis) <ul style="list-style-type: none"> ○ Questions for this exam will be made based on any topics (related to research methods, statistics and data analysis) that the student learned from the courses in his/her Masters or Doctoral program. ○ The student should submit his/her answers to QE committee within a specified time. This test shall be conducted by in-class test. 4-2) Test on the field of study (Note: This test includes ㉠ and/or ㉡ as described below) <ul style="list-style-type: none"> ○ Major exam ㉠ <ul style="list-style-type: none"> ✓ QE committee prepares for the reading list in the specified study field and provides it to the student no later than one month before the date when QE is taken. A set of questions will be made based on the reading list. ✓ The student should submit his/her answers to QE committee within a specified time. This test can be conducted by either in-class test or take-home exam and can include oral presentation on his/her answers. ○ Major exam ㉡ <ul style="list-style-type: none"> ✓ QE committee provides to the student the reading(s) related to the field of study. The student should submit a document which may include 1) his/her critiques of the article, 2) his/her own further research idea(s), and/or 3) detailed research plan to pursue his/her research idea(s) by the deadline QE committee indicates. ✓ This test can be conducted by take-home exam and can include oral presentation on his/her answers.
Fields of Study	Detailed fields of study <ul style="list-style-type: none"> ○ Operations Management ○ Accounting ○ Finance/Financial Engineering ○ Marketing ○ Management Information Systems

	<ul style="list-style-type: none"> o Organizational Behavior/Human Resource Management o Strategy Management/Technology Management/Entrepreneurship
Required Time	Determined by QE committee
Standard for Pass	70 points or higher in all the three individual tests described in 4 of the 'How' section above.
Measures on Unsuccessful Students	If the student does not pass the test(s), he/she has a chance to re-take the 'failed' test(s) only once in the following semester. If the student fails again for any individual test(s) he/she re-takes, the student will be terminated from the PhD or the MS-PhD program.
Standard for QE Application	<ol style="list-style-type: none"> 1. To apply for taking QE, the student should earn required course credits (for PhD or MS-PhD program) specified in the section of 'Degree Requirement by Management Engineering' in the UNIST Graduate Program Handbook. 2. All PhD or MS-PhD students must take QE within 3 years after having registered the program. If a student does not pass QE within 3 years after the registration, he/she will be terminated from the PhD or the MS-PhD program. If the student applies for QE at the end of the third year in his/her program, the student cannot have a chance to re-take QE.
Note	Effective date for this guideline is Spring 2022. It applies to all PhD and MS-PhD students who take QE from then onward.

Course Registration 수강신청

Course Registration Schedule for Fall 2024

Schedule	Date
Course Registration	Aug. 1st(Thu) 09:00 ~ Aug. 2nd(Fri) 15:00
Course Change and Confirmation	Sep. 2nd(Mon) 08:00 ~ Sep. 6th(Fri) 18:00

Max./Min. Credits for Course Registration 최대/최소 수강신청 학점

- Min. 3 credits ~ Max. 13 credits per semester
학기별 최소 3학점 ~ 최대 13학점
- Graduate students can register for four hundred unit undergraduate courses up to six credits as graduation credits.
학사과정 400단위 과목 수강 시 최대 6학점까지 졸업학점으로 인정 가능

Steps for Course Registration 수강신청 단계



※ 'Final Approval must be done after making all changes on the registration.

지도교수 최종 확인은 모든 정정 절차 마무리 후 진행 필요

1. Course Registration 수강신청

Master's Research / Doctoral Research 석·박사 논문연구

- The variable credit system applies to 'Master's Research' and 'Doctoral Research'. A student can select the credit that he/she wants:
석·박사 과목은 가변학점으로 수강신청 시 희망 학점을 기입
 - Master's Research: 1-3 credits
 - Doctoral Research: 3-9 credits
- The number of credits should be decided through consulting with the advisor. 지도교수 상담 후 학점 수 결정
- Students are allowed to register for only one research course of their own degree program (Master's program: master's research, Doctoral program: doctoral research, Combined master's- doctoral program: master's research or doctoral research)
논문연구과목은 각 과정별 과목만 수강 가능 (석사과정생: 석사논문연구, 박사과정생: 박사논문연구, 석·박사통합과정생: 석사논문연구 또는 박사논문연구)
- 'Master's Research' and 'Doctoral Research' cannot be registered at the same semester.
석사 논문연구와 박사 논문연구 한 학기에 동시 신청 불가

Course Change 수강정정

- Students can cancel a course and register for another course if seats remain in the first week of the semester.
학기 첫째 주에 수강과목 취소 및 신청 가능

Course Drop 수강 취소

- Application Period: from the 2nd~4th week of each semester
신청 기간: 매 학기 2~4번째 주
- For dropping a course, students are required to apply for "Course Drop" on the portal site. After getting approval from the course instructor, their advisor and Department(school) head, the course will be deleted from registration record.
포털에서 수강취소 신청 가능. 과목 담당교수, 지도교수, 학과(부)장 승인 필요

Course Registration Advisor Approval

- When the registration is fully completed, go to the portal and apply for the advisor approval for the course registration.
최종 수강 신청 완료 후(정정 이후 포탈 수강신청 내역 결재를 통하여 지도교수 승인 필요

2. How to Register for Courses 수강신청 방법

□ Search the courses 조건 검색

- After checking the conditions, click the 'Search' button.

조건 확인 후, '검색' 버튼 클릭

The screenshot shows the 'Course Registration' page. At the top, it says '2017 2nd Semester GR Course Registration : 2017.07.10/00:00:00 - 2017.07.21/24:00:00'. Below this, there are sections for 'List of Courses Registered for' and 'Confirmation of Courses Registered for'. The 'Browse Open Courses' section is active, and a red box highlights the search filters: 'Search', 'Major', 'Another school', 'Free elective', radio buttons for 'Course Code' and 'Course Title', a 'Search Word' input field, and a 'Search' button.

- Click the 'Application' button to apply for the course.

수강희망과목 '신청' 버튼 클릭

Browse Open Courses

Search Major Another school Free elective

* Major: Materials Science Engineering Search

List of Open Courses

Lines Per Page: 10 lines

Plan	Course classification	Course Code	Course Title	Professor's Name	Credits/lecture/experiment	Remaining Seats	Lecture Time/Lecture Room	Program	선이수과목요청도	선이수과목유형	Who to Take Course	Application
AMEL	M3E53101	Light Emitting Diodes	Seon-Yong Kwon	3/3/0	15	MON WED 10:30-11:45 (102-611)	Master's Course					Application
AMEL	M3E53021	Semiconductor Physics and Devices	Jeong Min Baik	3/3/0	20	MON WED 13:00-14:15 (102-611)	Master's Course					Application
AMEL/NCEIC	M3E57321	Organic Optoelectric Materials/Devices	Myoung Moon Song	3/3/0	10	MON WED 14:30-15:45 (102-711)	Master's Course					Application
AMER	M3E59001	The Seminars	Ki-Suk Lee	1/1/0	80	THU 16:00-17:15 (104-8207)	Master's Course					Application
AMEL	M3E68201	S.T. on M3E I (Special Topics in Semiconductors)	Jung-Woo Yoo	3/3/0	10	MON WED 13:00-14:15 (102-711)	Master's Course					Application
AMEL	M3E68201	S.T. on M3E II (Synthesis and Applications of Polymers)	Lee-Soon Park	3/3/0	10	MON WED 14:30-15:45 (102-611)	Master's Course					Application
AMEL	M3E68201	S.T. on M3E III (Nano Energy)	Jeong Min Baik	3/3/0	10	MON WED 16:00-17:15 (102-611)	Master's Course					Application
AMEL	M3E69401	S.T. on Materials Science Eng. IV (Energy Environment Nano Materials)	Kyoung Jin Choi	3/3/0	10	TUE THU 17:30-18:45 (102-611)	Master's Course					Application
AMER	M3E69001	Master's Research	Zonghoon Lee	1-2/0/0	80	(102-611)	Master's Course					Application
AMEL	M3E75301	Nano Convergent Energy Devices	Jae Sung Son	3/3/0	20	TUE THU 10:30-11:45 (102-611)	Doctoral Course					Application

- Please check the course list you applied for.

신청된 과목 리스트 확인

Course Registration

2017 2nd Semester GR Course Registration : 2017.07.10/00:00:00 - 2017.07.21/24:00:00

List of Courses Registered for

Confirmation of Courses Registered for

Plan	Course classification	Course Code	Course Title	Professor's Name	Credits/lecture/experiment	Lecture Time/Lecture Room	Program	Date of Course Registration	Note	Cancel
AMEL	M3E53101	Light Emitting Diodes	Seon-Yong Kwon	3/3/0	MON WED 10:30-11:45 (102-611)	Master's Course	2017.07.18	Self registration	Cancel	
AMEL	M3E68201	S.T. on M3E II (Synthesis and Applications of Polymers)	Lee-Soon Park	3/3/0	MON WED 14:30-15:45 (102-611)	Master's Course	2017.07.18	Self registration	Cancel	
AMER	M3E69001	Master's Research	Zonghoon Lee	1-2/0/0	(102-611)	Master's Course	2017.07.18	Self registration	Cancel	

Total applied courses: 3 Total credits applied: 9.0 Credits Allowed to Register for: 13.0

2. How to Register for Courses 수강신청 방법

Register for Variable Credit Courses 가변학점 신청

- 'Master's research' and 'Doctoral research' are courses that the variable credit system is applied to. Click the 'Application' button, and then the screen appears as shown below.

석·박사 논문연구과목은 가변학점이며, '신청' 버튼 클릭 시 아래 창이 나타남

- Enter the number of credits you would like to register and click the 'Confirmation' button.

수강하고 싶은 학점을 입력하고 '확인' 버튼 클릭

- * Student should double check final credit he or she registered. The registered credit shall not be changed during the semester.

최종 수강 학점은 학기 중 변경이 불가하므로, 최종 신청학점 확인 필요

Credits Applied

✔ Confirmation

Click confirm after selecting research course credit.

Minimum credits: 3

Maximum credits: 9

* Credits Applied: 3, 4, 5, 6, 7, 8, 9

Close

2. How to Register for Courses 수강신청 방법

Course Catalog 코스 카탈로그

- Course Catalog is available at the UNIST Homepage.
(Campus Life > Academics > Academic Curriculum)

학교 홈페이지에서 코스 카탈로그 이용 가능 (대학생활 > 학사안내 > 교육과정)



Academics

All academic courses at UNIST are conducted in English to contribute to the globalization of science and technology. Every student is required to major in two or more tracks to create a learning environment where conducting multidisciplinary research is possible.

- Academic Calendar
- Academic Curriculum
- Browse Open Courses
- Requirements For Graduation
- Academic Affairs
- Academic Organization

VIII

Academic Services 학사 서비스

1. Personal Information Update 개인정보 업데이트

Personal Information Update (online) 개인정보 업데이트 (온라인)

- If there are any changes to personal contact information such as home phone number, cell phone number or email address, please log into the student portal(<http://portal.unist.ac.kr>), click on the 'Student Registry' menu and go to the 'Change student info' then enter the new information. (available to change personal contact: if you have a Korean mobile number, please modify your contact for receiving notification SMS from UNIST)

포털 학적 > 학생정보 > 학생정보 수정에서 개인정보 변경 (연락처, 영문성명 수정도 가능)

- For two-factor authentication (additional authentication through phone, SMS, or mobile app) required to access UNIST services (portal, e-mail, etc.), it is required to install the "Microsoft Authenticator" app or register your mobile number. If you use two-factor authentication by phone/SMS, you cannot receive an authentication code in case your mobile number is changed, so you should register your mobile number which is scheduled to be changed on the account management site (<https://account.unist.ac.kr>) in advance.

정보서비스(포털, 이메일 등) 접속 시 요구되는 멀티인증(전화/문자/앱을 통한 이중인증)을 위해 'Microsoft authenticator' 모바일앱 또는 휴대폰 번호 등록이 필요합니다. 전화/문자로 멀티인증을 사용하는 경우 휴대폰번호가 변경되면 인증코드를 받을 수 없으므로 사전에 계정관리사이트(<https://account.unist.ac.kr>)에서 변경 예정인 휴대폰번호를 추가 등록해주셔야 합니다.

- Please contact the Educational Affairs Team for changing your picture in the portal.

포털의 본인 사진 변경 시 학사팀 학적 담당자에게 연락

The screenshot shows the 'Search for student information' form with fields for Student number, Name, Year/semester(total), State of school register, Degree program, School, Academic advisor, Co-advisor, Track4, Track1, Track2, and Track3.

Below the form is a table with the following data:

Start Date	End date	Start Year	Start Semester	State of school register	Reason(s) for status change	Details for status change	Year in whi
2017.03.01	9999.12.31	2017	1st Semester(Summer)	Enrolled	The first admission		

2. Certificates 증명서

Types of Certificates

Types		Certificate
1	Undergraduate/Graduate	Certificate of Enrollment
2	Undergraduate/Graduate	Certificate of Expulsion
3	Graduate	Certificate of Course Completion
4	Undergraduate	Certificate of Graduation
5	Graduate	Certificate of Degree Conferment
6	Undergraduate	Certificate of Expected Graduation
7	Graduate	Certificate of Expected Course Completion
8	Graduate	Certificate of Expected Degree Conferment
9	Undergraduate/Graduate	Academic Transcripts
10	Undergraduate/Graduate	Certificate for Leave of Absence
11	Undergraduate/Graduate	Confirmation of scholarship
12	Undergraduate/Graduate	Confirmation of Non Payment of scholarship
13	Undergraduate	Certificate of Grade Completion
14	Undergraduate/Graduate	History of Enrollment

- ※ Students are required to input his/her English name on the portal site for the English version of his/her certificates. 포털 영문 성명이 정확히 입력되어 있어야 함
- ※ Certificate of Enrollment can be issued during enrolled period. (not available during the leave of absence) 재학증명서는 재학기간 중 발급, 휴학기간 중에는 휴학증명서 발급 가능

Services

Types	Contents	Service type	Cost
Kiosk	Machines are available for 24 hours a day	Print	500 won/1 copy
Internet	Real-time issuance using the Internet	Print, Digital format, Domestic delivery	Print: free Digital: 2,000 won/1 copy Delivery: 8,000 won/1 copy
PostMAN	International Mail Service	DHL Mailing	Actual cost
Fax	Applying through '정부24(gov.kr)' website	Visit community service center	Commission (community service center)
Online Attachment	Attaching certificates to Human Resources Development Service of Korea	Attach	Commission (HRD Service of Korea)

- ※ UNIST certificate issuance: use the same ID(not student number)/PW as the UNIST portal https://uni.webminwon.com/servlet/WMINDEX?COMMAND=UNIST&LA=ko_KR
- ※ Fax, mobile, and online attachment services are available only for Korean students.

How to issue

Types	How to	Remarks
On campus	MAB 1F, Lobby of the Bldg.104 (kiosk)	Educational Affairs Team 052-217-1116 Services related inquiries 02-1644-2378
	MAB 2F Educational Affairs Team Available time: weekdays 09:00~18:00	
Internet(PostMAN)	Portal-Certificate issuance	

- ※ For further information, contact the Educational Affairs Team: 052-217-1116(Tel)/1119(Fax)

4. Contact Address regarding Academics

학사업무 관련 연락처

Office	Location		Contact Info
			Tel.: 052-217-
Educational Affairs Team	201 Main Administration Bldg. #203		1112~7
Mechanical Engineering	Academic and Student Affairs Team, College of Engineering	108 Natural Science Bldg. #U203-2	1807
Civil, Urban, Earth, and Environmental Engineering			1803
Graduate School of Semiconductor Materials and Devices Engineering			1807
Materials Science and Engineering			1802
Energy and Chemical Engineering			1806
Nuclear Engineering			1802
Graduate School of Carbon Neutrality			1806
Design	Academic and Student Affairs Team, College of Information and Biotechnology	108 Natural Science Bldg. #U203-1	1846
Industrial Engineering			1847
Biomedical Engineering			1848
Biological Sciences			1848
Graduate School of Artificial Intelligence			1846
Graduate School of Health Science and Technology			1848
Electrical Engineering			1847
Computer Science and Engineering			1846
Physics	Academic and Student Affairs Team, College of Natural Sciences	108 Natural Science Bldg #701-12	1882
Mathematical Sciences			1882
Chemistry			1883
School of Business Administration	School of Business Administration Admin. office	114 Business Administration Bldg. #601	3666