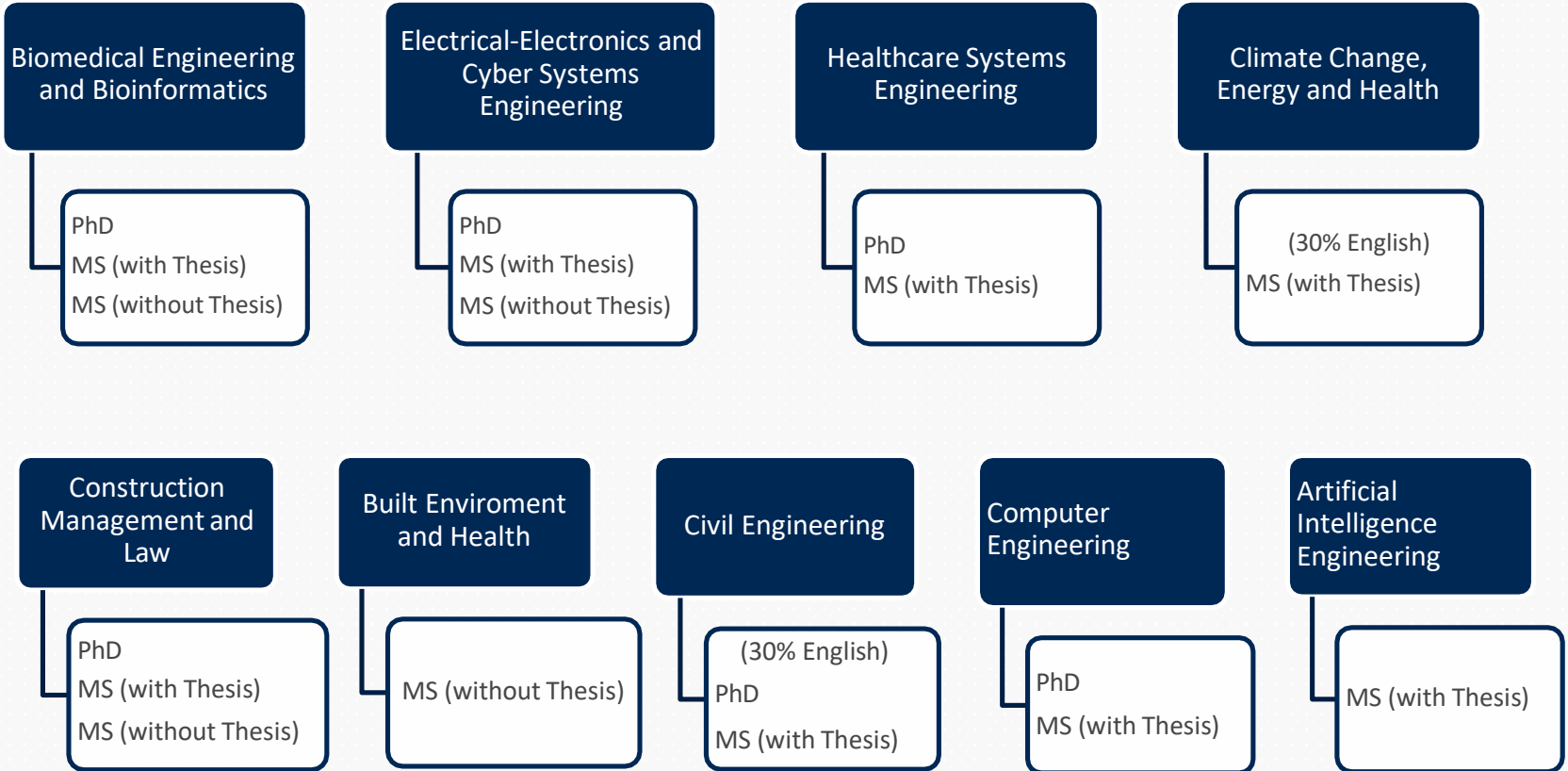


# Graduate School of Engineering and Natural Sciences

## Graduate Programs Orientation



# Graduate School of Engineering and Natural Sciences



# Management Organization



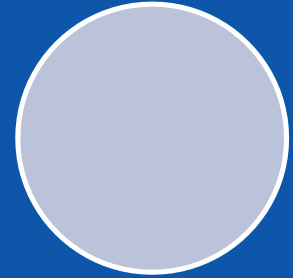
Prof. Dr.  
Yasemin YUKSEL  
DURMAZ,  
Director of  
GSENS



Asst. Prof.  
Zafer İŞCAN  
Deputy Director  
of GSENS



Tuba ÖZCAN  
Secretary of  
GSENS



Şule HORUZ  
Administrative  
Staff



# Problem Solving Organization



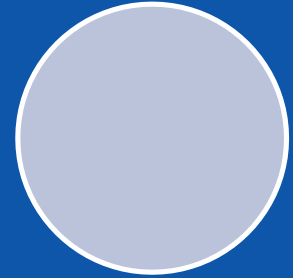
Prof. Dr.  
Yasemin YUKSEL  
DURMAZ,  
Director of  
GSENS



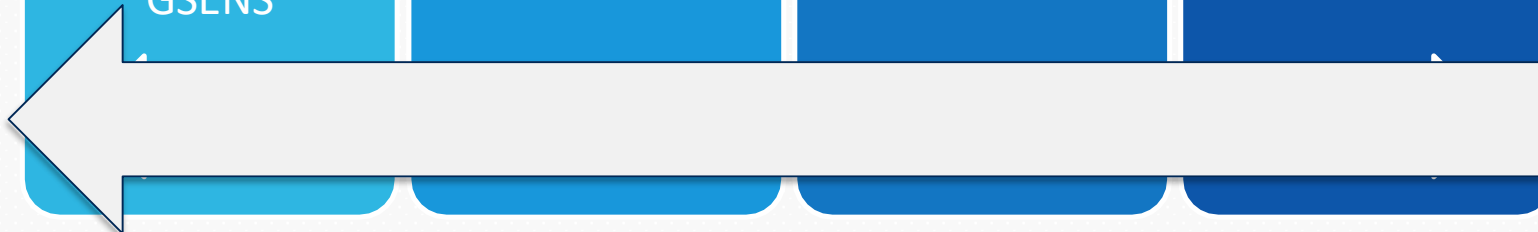
Asst. Prof.  
Zafer İŞCAN  
Deputy Director  
of GSENS



Tuba ÖZCAN  
Secretary of  
GSENS



Advisor



**First, check**













\* [sens.medipol.edu.tr](https://sens.medipol.edu.tr)















\* <https://www.medipol.edu.tr/akademik/enstituler/fen-bilimleri-enstitusu>

- Courses
- Guideline for graduate student
- Guideline and template for thesis
- Procedures that needs to be done after defense exam
- Forms
- Letters
- Application details
- Program details
- Course schedule

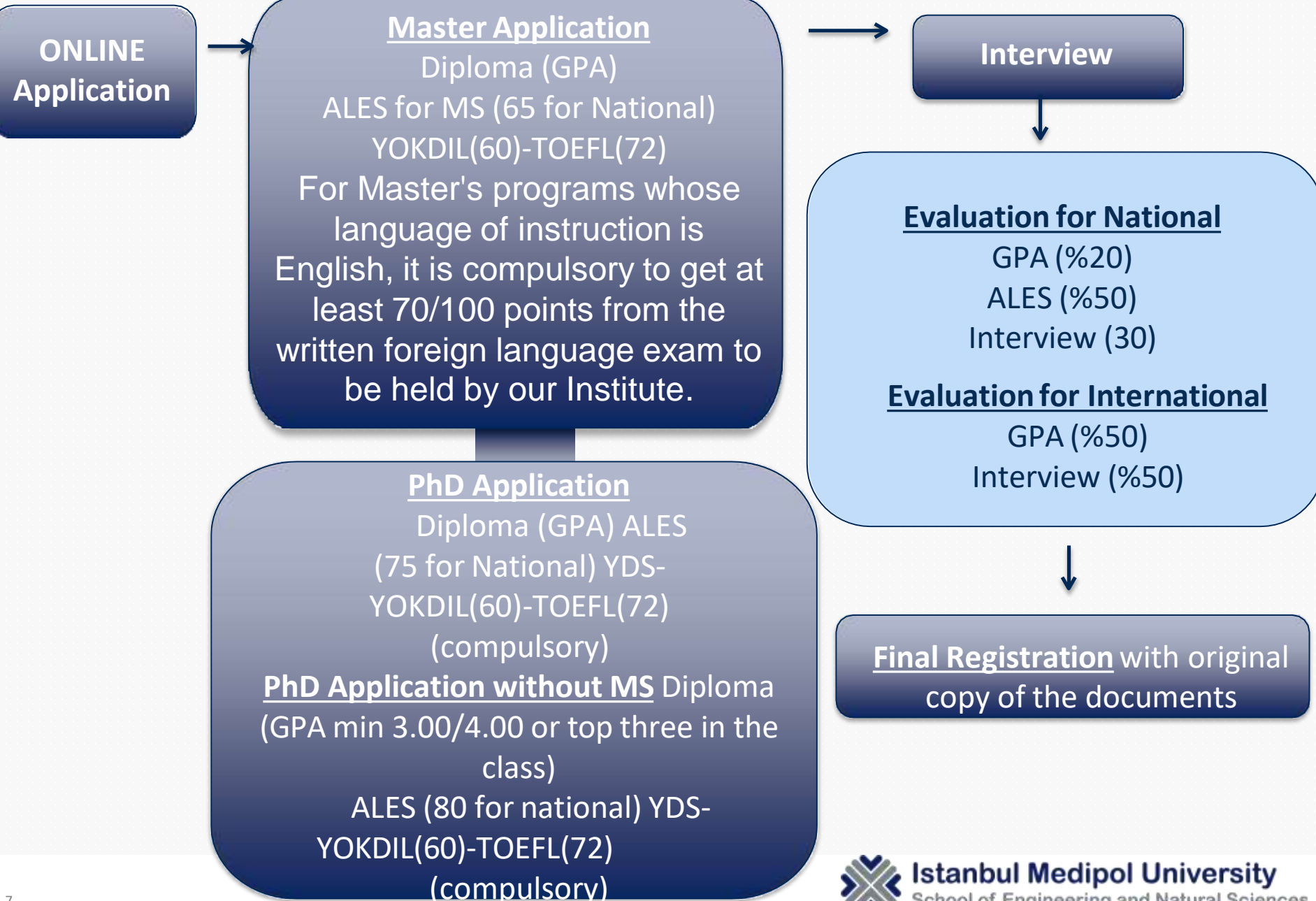


## ■ Forms/Letters

Formlar	
Medipol Üniversitesi > Akademik > Enstitüler > Fen Bilimleri Enstitüsü > Formlar	
	<a href="#">Özel Öğrenci Olarak Ders Alma</a>
	<a href="#">Özelden Asile Transfer Dilekçesi / Special Student General Information</a>
	<a href="#">Tez Kısıtlama Formu / Thesis Restriction Form</a>
	<a href="#">Yatay Geçiş Başvuru Dilekçesi / Transfer Letter</a>
	<a href="#">Tez Teslim Tutanağı / Thesis Delivery Report</a>
	<a href="#">Tez Savunma Jürisi ve Savunma Tarihi Formu / Thesis Exam Committee and Defense Date</a>
	<a href="#">Tez Konusu Önerisi Formu / Thesis Topic Selection Form</a>
	<a href="#">Tez İzleme Komitesi Formu / Thesis Supervision Committee</a>
	<a href="#">Tez Savunma Sınav Başvurusu / Application to Take Thesis Defense Exam</a>
	<a href="#">Tez Çalışması İntihal Raporu Formu / Thesis Plagiarism Report Form</a>
	<a href="#">Tez Danışmanı Önerisi Formu / Thesis Advisor Selection Form</a>
	<a href="#">Tez Danışman Değişikliği / Thesis Advisor Change Letter</a>

	<a href="#">Kendi İsteği ile Kayıt Silme / Registration Delete Form</a>
	<a href="#">Kayıt Dondurma / Registration Freeze Petition</a>
	<a href="#">Kayıt Açma Dilekçesi / Re-Registration Letter</a>
	<a href="#">Sınav Tutanağı / Exam Result</a>
	<a href="#">İlişik Kesme Dilekçesi / Mezuniyet / Registration Delete Letter (Graduation)</a>
	<a href="#">İlişik Kesme Belgesi / Registration Delete Form</a>
	<a href="#">Doktora Yeterlik Sözlü Sınav Tutanağı / Oral PhD Qualifying Exam Result</a>
	<a href="#">Doktora Yeterlik Yazılı Sınav Tutanağı / Written PhD Qualifying Exam Result</a>
	<a href="#">Doktora Yeterlik Sınav Başvurusu / Application to Take PhD Qualifying Exam</a>
	<a href="#">Ders Transfer Dilekçesi / Course Transfer Letter</a>
	<a href="#">Doktora Yeterlik Sınav Jürisi ve Sınav Tarihi / PhD Qualifying Exam Committee and Date</a>
	<a href="#">Doktora Yeterlik Ders Seçimi ve Kurum Dışı Jüri Üyesi Formu / Selection of Courses and Committee Members from outside of the Unit</a>
	<a href="#">Tez Savunması Sonrası Yapılması Gereken İşlemler</a>
	<a href="#">Procedures That Needs to be Done After the Thesis Defense</a>

# Getting into GSENS



# Academic Calendar

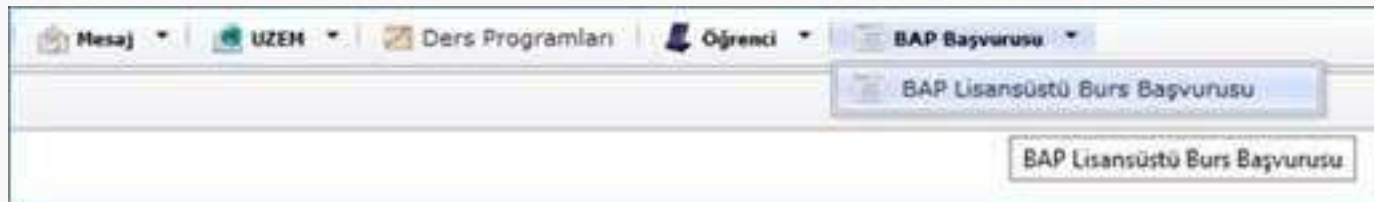
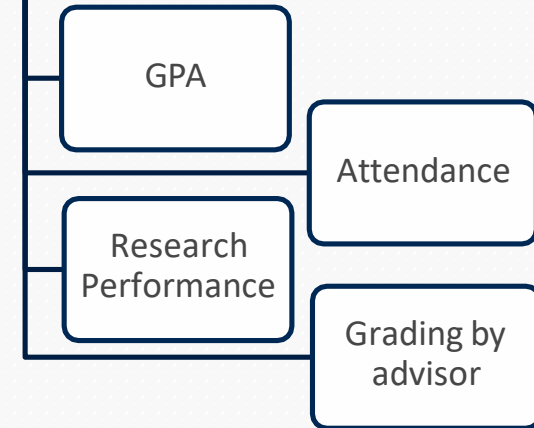
Explanation	Start	End
Beginning - End of Online Application for Fall Semester	22.09.2025	02.01.2026
Fall Semester Course Selection	16.09.2025	26.09.2025
Fall Semester Add-Drop Term	27.09.2025	03.10.2025
Fall Semester - Midterms	08.11.2025	16.11.2025
Fall Semester - End Of Courses	02.01.2026	02.01.2026
Fall Semester - Final Exams	05.01.2026	16.01.2026
Thesis Submission Deadline for Fall Semester (08.12.2025 is the last defense exam date for candidates who will apply for a PhD)	08.01.2026	08.01.2026
Fall Semester Proficiency Written Exam	14.01.2026	14.01.2026
Fall Semester Proficiency Oral Exam	19.01.2026	23.01.2026
BEGINNING -END OF SPRING SEMESTER	09.02.2026	22.05.2026
Spring Semester - Course Selection	07.02.2026	13.02.2026
Spring Semester Add-Drop Term	14.02.2026	20.02.2026
Spring Semester - Midterms	28.03.2026	05.04.2026
Spring Semester - End Of Courses	22.05.2026	22.05.2026
Spring Semester - Final Exams	01.06.2026	12.06.2026
Spring Semester Proficiency Written Exam	01.07.2026	01.07.2026
Spring Semester Proficiency Oral Exam	06.07.2026	10.07.2026
Thesis Submission Deadline for Spring Semester (20.07.2026 is the last defense exam date for candidates who will apply for a PhD)	20.08.2026	20.08.2026

Student who wants to apply for PhD program needs to be careful about the indicated thesis submission deadline otherwise they won't have a valid diploma to make final registration

# Each Semester

- Course selection with approval of your advisor.
- BAP application.
- Completion of BAP document based on % fellowship.
  - All first semester students are fully supported as long as they are full time researcher in the university, but they still need to apply for BAP and deliver proper document to accounting department.

## How does BAP work?



MS		ECTS
Minimum Course Requirement	<ul style="list-style-type: none"> <li>Graduate Seminar</li> <li>Scientific Research Techniques and Ethics</li> <li>7 technical courses (21 credits)</li> </ul>	Have to be 60 ECTS (except for Scientific Research Techniques and Ethics)
Minimum ECTS Requirement	120	(7+2) courses 60 ECTS +Thesis 60 ECTS

PhD	With MS Degree	ECTS	Without MS Degree	ECTS
Minimum Course Requirement	<ul style="list-style-type: none"> <li>Graduate Seminar</li> <li>Scientific Research Techniques and Ethics*</li> <li>7 technical courses (21 credits)</li> </ul>	60	<ul style="list-style-type: none"> <li>Graduate Seminar</li> <li>Scientific Research Techniques and Ethics</li> <li>14 technical courses (42 credits)</li> </ul>	120
	<ul style="list-style-type: none"> <li>Qualifier</li> </ul>	30	<ul style="list-style-type: none"> <li>Qualifier</li> </ul>	30
	<ul style="list-style-type: none"> <li>Thesis</li> </ul>	120	<ul style="list-style-type: none"> <li>Thesis</li> </ul>	120
	<ul style="list-style-type: none"> <li>Guided Research</li> </ul>	30	<ul style="list-style-type: none"> <li>Guided Research</li> </ul>	30
Minimum ECTS Requirement		240		300

- Course load must be completed within 4 semesters, otherwise your studentship will be ended.
- Missing ECTS can be complete with "Guided Research I and II".
- Students CAN transfer maximum half of the required course credits. This means GSENS accepts max 3 courses
- \*If it hasn't taken before
- Scientific Research Techniques and Ethics course is not a technical course



# Courses

- **Course load must be completed within 4 semesters, otherwise your studentship will be ended.**
- List of the courses can be found at [sens.medipol.edu.tr](https://sens.medipol.edu.tr)
- MS student can take max **2 undergraduate course** if they haven't taken before.
- However, PhD student **can not** take the undergraduate courses.
- MS and PhD students can take max 2 courses from different graduate schools (PhD without MS can take max 4 courses).
- PhD students can take MS courses **by considering the balance in** the transcript.
- **MS student can take both MS and PhD courses.** However, their PhD courses that they took during their MS won't be count as course load for PhD if they continue to PhD program.

# Program Durations

	Master	PhD	
		With MS	Without MS
Min. Time (semester)	4	8	10
Max. Time (semester)	6	12	14

- Students who fail to complete the program requirements within the maximum allowed duration will have their studentship terminated.
- Maximum time to complete MS courses is 4 semesters.
- Maximum time to complete PhD courses is 4 semesters for PhD with MS and 6 semesters for PhD without MS.
- Early graduation is possible from MS program (end of 3<sup>rd</sup> semester), however requires solid success.

# Advisor

- The advisor assigned in the first semester on Mebis system is your academic advisor and is the person who approves your course selections (for new student).
- It is obligatory to assign a **Thesis/Project advisor to each graduate student until the end of the first semester.** For this reason, students are required to fill in the relevant forms at the end of the first semester and submit them to GSENS.
- The **thesis/project topic** must be decided **at the end of the second semester at the latest.** For this reason, students are required to fill in the relevant forms at the end of the first semester and submit them to GSENS.
- If the thesis work requires more than one advisor, a **co-advisor** from the university or out of university can also be selected.
- The student's requests for a reasoned **change of advisor** are submitted to GSENS and become final with the decision of the Graduate School Administrative Board.
- **GSENS needs to be informed in advance for advisor change or co-advisor assignment requests. Last min request are not considered.**
- In the thesis topic changes, the remaining time for the completion of the thesis should be considered and the justification should be presented according to the legislation. **Thesis Title** changes that do not cause any change in the thesis should be submitted to GSENS with a petition.



[sens.medipol.edu.tr/forms/](https://sens.medipol.edu.tr/forms/)



**Istanbul Medipol University**  
School of Engineering and Natural Sciences

# Thesis Topic / Title Change

- The student proposes the thesis topic together with his/her advisor to the institute by the end of the second semester at the latest.
- The thesis advisor and thesis topic are finalized with the approval of the institute board of directors.
- In changes to the thesis topic, the deadlines in the legislation are taken into consideration, and a work schedule is presented regarding issues such as literature search, experiment phase and thesis writing.
- This obligation is not required for requests for change of thesis title that do not cause any change in the thesis subject.

These requests must be notified to the institute at least 15 days before the thesis defense.



[sens.medipol.edu.tr/forms/](https://sens.medipol.edu.tr/forms/)



**Istanbul Medipol University**  
School of Engineering and Natural Sciences

# Ethics Committee

## Studies Requiring an Ethics Committee;

- All human research and projects must be evaluated and approved before the study begins/data is collected.
- All kinds of research conducted with qualitative or quantitative approaches that require collecting data from participants using survey, interview, focus group study, observation, experiment and interview techniques,
- Use of humans and animals (including materials/data) for experimental or other scientific purposes,
- Clinical studies conducted on humans,
- Research conducted on animals,
- Retrospective studies in accordance with the personal data protection law.

In studies requiring ethics committee permission, information about the permission (committee name, date, barcode and issue number) should be included in the method section and, if there is Ethics Committee approval obtained on behalf of the student, on the last page of the thesis.



[sens.medipol.edu.tr/forms/](https://sens.medipol.edu.tr/forms/)



**Istanbul Medipol University**  
School of Engineering and Natural Sciences

# Finalizing Thesis and Graduation (MS)

- **Start planning your defense with your advisor 2 months** prior to your expected graduation (defense) day. Be careful about thesis submission deadlines.
- Obtained results should be **written as a thesis** by following the rule the GSENS defined.
- Completed thesis should be **submitted to advisor** for his/her review. Please provide your advisor time for review like **minimum 2 weeks** before thesis submission.
- **Advisor approves and submits thesis to GSENS along with all required information** for thesis defense like committee members, defense date and time etc...
- Forms need to be filled;
  - *Thesis submission form.*
  - *Application to take thesis defense exam.*
  - *Thesis exam committee and defense date form .*
  - *Thesis plagiarism report form.*
- **GSENS creates the originality report** and sends it along with thesis to advisor and other committee members. Theses with an **similarity rate of less than 15%** are accepted. The thesis originality report should not be sent to the members of the jury before it is considered successful. **This takes 3-4 weeks.**
  - Once it is delivered to your thesis committee you have a month to defend it.



[sens.medipol.edu.tr/forms/](https://sens.medipol.edu.tr/forms/)

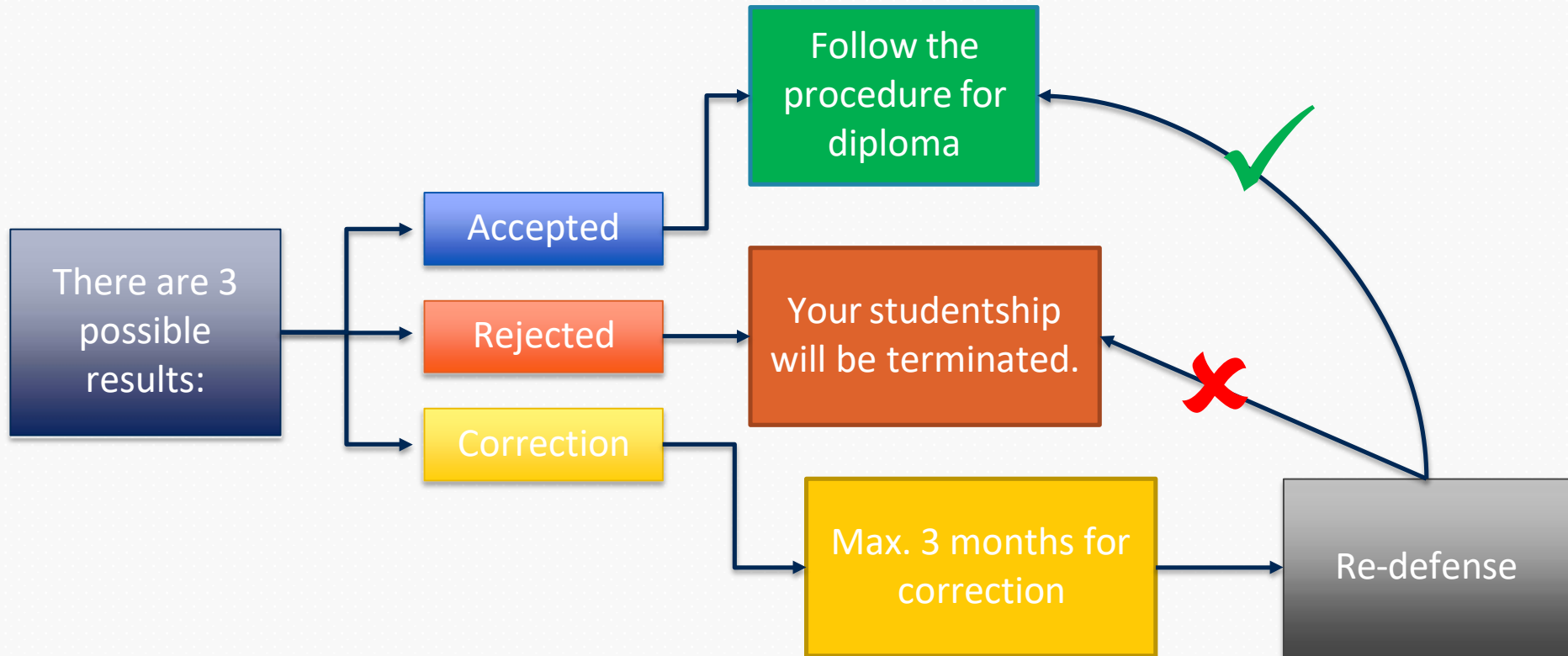
# Defense Exam (MS)

- Defense committee;
  - 3 committee members including student's advisor.
  - 1 committee member should be from another university
  - Co-advisor can join the exam.
- Exam results should be reported to GSENS within **3** days.
  - Forms need to be filled.
    - Exam result form.



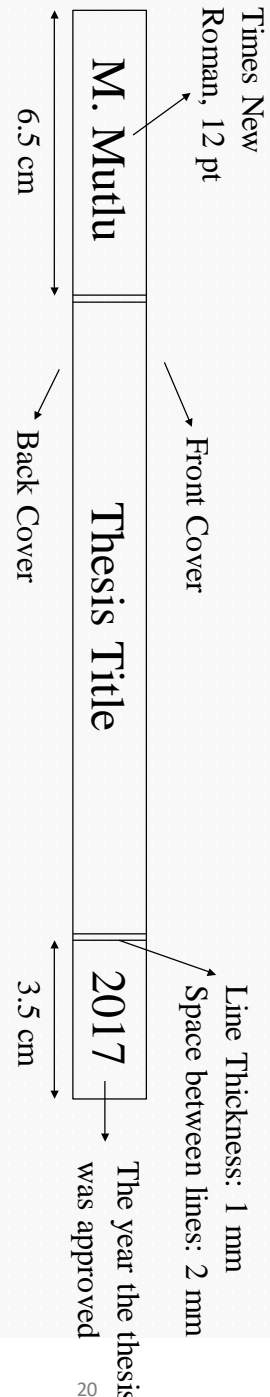
[sens.medipol.edu.tr/forms/](https://sens.medipol.edu.tr/forms/)

# Defense Exam (MS)



# Diploma (MS)

- The thesis, which has been corrected within a month and prepared **according to the thesis writing guideline**, needs to be checked by the relevant GSENS Thesis Control Supervisor and the Thesis Checklist needs to be completed. Before this process, the **STUDENT'S ADVISOR MUST REVIEW THE THESIS ONE LAST TIME.**
- The thesis, which has been prepared and checked according to the thesis writing guideline **(2 hard copies containing the signatures of all jury members and the result page of the originality report, and 1 electronic copy as CD)** should be submitted to GSENS.
- Graduation date will be the date that student submitted his\her thesis to GSENS.
- If necessary, student can request 1 more month to complete this process.
  - However, after this point, if thesis won't be submitted, student will be passive student and won't be able to use any right of being student. (Immigration office and army for native students)
  - At end of the max. time for master program, studentship will be terminated.



**THESIS TITLE HERE**

**SECOND LINE IF NECESSARY**

**THIRD LINE IF NECESSARY, FIT TITLE IN THREE LINES**

**MSc Thesis**

**Name SURNAME of student**

Page Margins: 3 cm from the top and bottom, 2.5 cm from the left and right

Paper Type: A4 Times New Roman-12 Points

Logo Size: Height 4 cm, width 10.72 cm.

From Top to Bottom: Logo 3 cm, thesis title 11 cm, thesis type and name-surname 15 cm,

Institute and program name 21 cm, date 24 cm

**Graduate School of Engineering and Natural Sciences**

**Graduate Program**

**Month, Year of defense**

**CMYK: 100, 81, 0, 51**

ISTANBUL MEDIPOL UNIVERSITY  
GRADUATE SCHOOL OF ENGINEERING AND NATURAL SCIENCES  
PROCEDURES TO BE MADE AFTER THE THESIS DEFENSE

1. Students who are accepted as successful in the thesis defense exam have to fill the Thesis Data Entry Form online electronically after entering the system (<https://tez.yok.gov.tr/UlusalTezMerkezi/sistemGiris.jsp>) with their own E-Government password. Then, Thesis Data Entry Form will be delivered to the Institute (GSENS) as hard copy by printing out.
2. Students who are successful in the thesis defense exam and fulfilled the other requirements for graduation, they have to submit two hard copies of the thesis signed by the jury and one CD contains PDF version of the thesis within one month after the date of the thesis defense exam to the Institute (GSENS).
3. The name of the electronic PDF file of the thesis in the CD has to be the same Reference No. generated in the Thesis Data Entry Form.
4. The result page of the TURNITIN Originality Report has to be added to thesis as last page of the thesis. The student's advisor should check the thesis before preparing the hard copies. The hard copy of the thesis and the PDF version (CD) must be identical. At this point, the thesis even with small differences can be decided as invalid by the Higher Education Council (YOK) system.
5. The students who submit his/her thesis to the Institute (GSENS) and fulfill the other requirements have to submit Registration Delete Form and the Graduation Letter to the Institute as well to be able to complete official graduation process.
6. Graduate thesis;
  - a) If the patent application for the graduate thesis or the process of obtaining a patent continues; Two years \*Article 6 (1)
  - b) Access to thesis might be postponed for a period of six months if the thesis has the information, findings, new techniques, materials and methods, which have not been published or protected through a patent yet. \*Article 6 (2)
7. Students who wish to make a request for constraint on their thesis, have to apply to Institute (GSENS) with the Thesis Constraint Letter. This application has to be made during the submission of the Thesis Data Entry Form.
8. Student who do not apply with the Thesis Constraint Letter, their thesis will be available online on the National Thesis Center.

*\*The directive on the Collection, Regulation and Opening of Graduate Theses in Electronic Environment.*



# PhD

- Course load should be completed within 4 semester.
- PhD students must take the Qualifying Exam by the end of the 5th semester (by the end of the 7th semester for students admitted without MS).
- In the 4<sup>th</sup> semester they can register to QE preparation course along with the course.

## Qualifying Exam (QE)

- Two times in a year (January and July)
- Register to QE preparation course.
- End of that semester submit the form.
  - Application to take PhD Qualifying Exam



[sens.medipol.edu.tr/forms/](https://sens.medipol.edu.tr/forms/)

# 2025-2026 Academic Year Qualifying Exam Calendar

Fall Semester Written Qualifying Exam	14.01.2026
Fall Semester Oral Qualifying Exam	19.01.2026 - 23.01.2026
Spring Semester Written Qualifying Exam	01.07.2026
Oral Semester Oral Qualifying Exam	06.07.2026 - 10.07.2026

Sub-committee contains student`s advisor

Each PhD program sets their QE committee which forms sub committee based on student`s course selection



Sub-committee organizes the written exam



Sub-committee organizes the oral exam

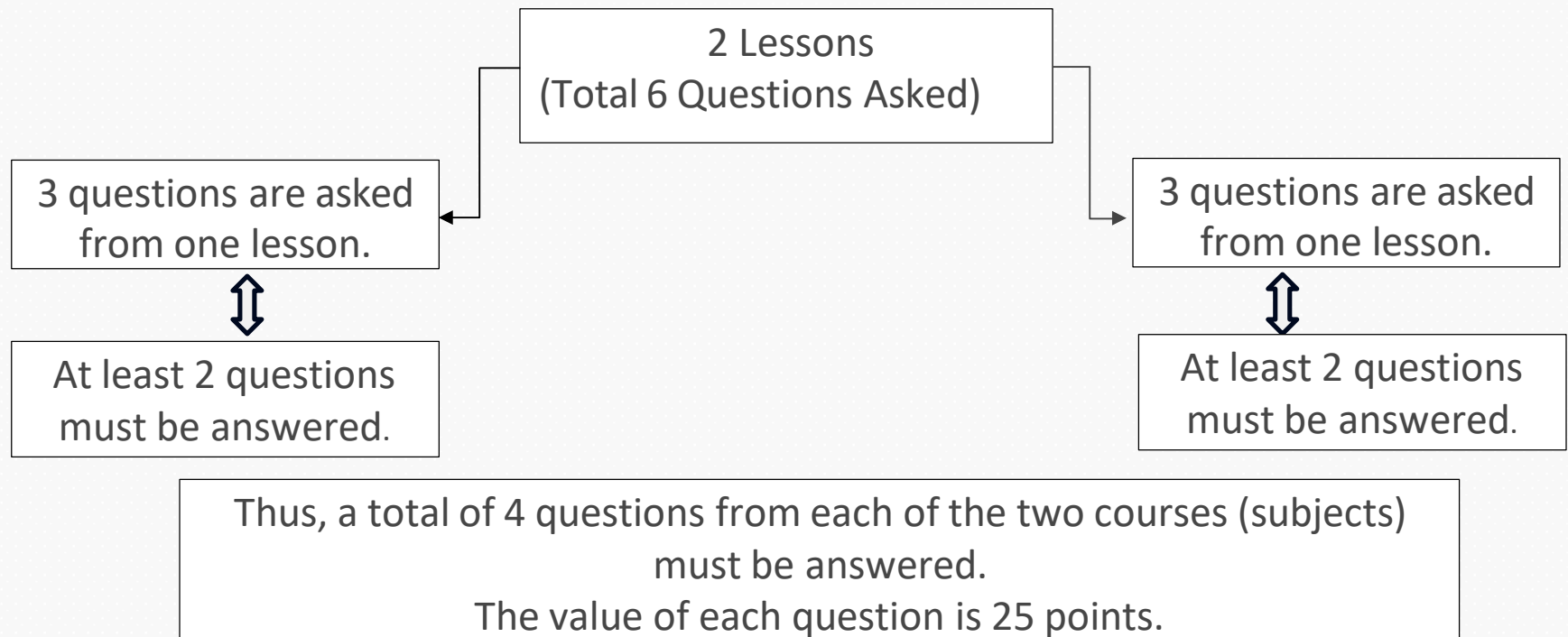
- Prepares the written exam question
- Evaluates the written exam question and signs the Q&A sheets
- Committee members do not have to physically be there
- Written exam should be on the same day for all students

- If student is successful, same or different sub – committee can make the oral exam
- Committee members have to physically be there
- They make a final decision



# QE for Computer Engineering Program

- QE committee consist of 5 members including advisor (2 members from different universities, 2 from department)
- **Written Exam:**
  - Two topics suitable for the department are selected.
  - 6 questions (3Q/course, 2Q/course have to be answered)
  - 75 is required to take oral exam.



## ➤ Oral Exam:

- Student prepares a survey paper in the relevant research field.
- 2 weeks before oral exam, the student delivers the survey paper to committee members.
- Evaluation of survey paper: Advisor evaluates 60% and committee evaluates 40% of it.
- Survey paper contributes the 40% of the oral exam grade.
- Student makes 30 min presentation of the survey paper to same committee members.
- After presentation, exam will continue as Q&A.

# COED Course Pool

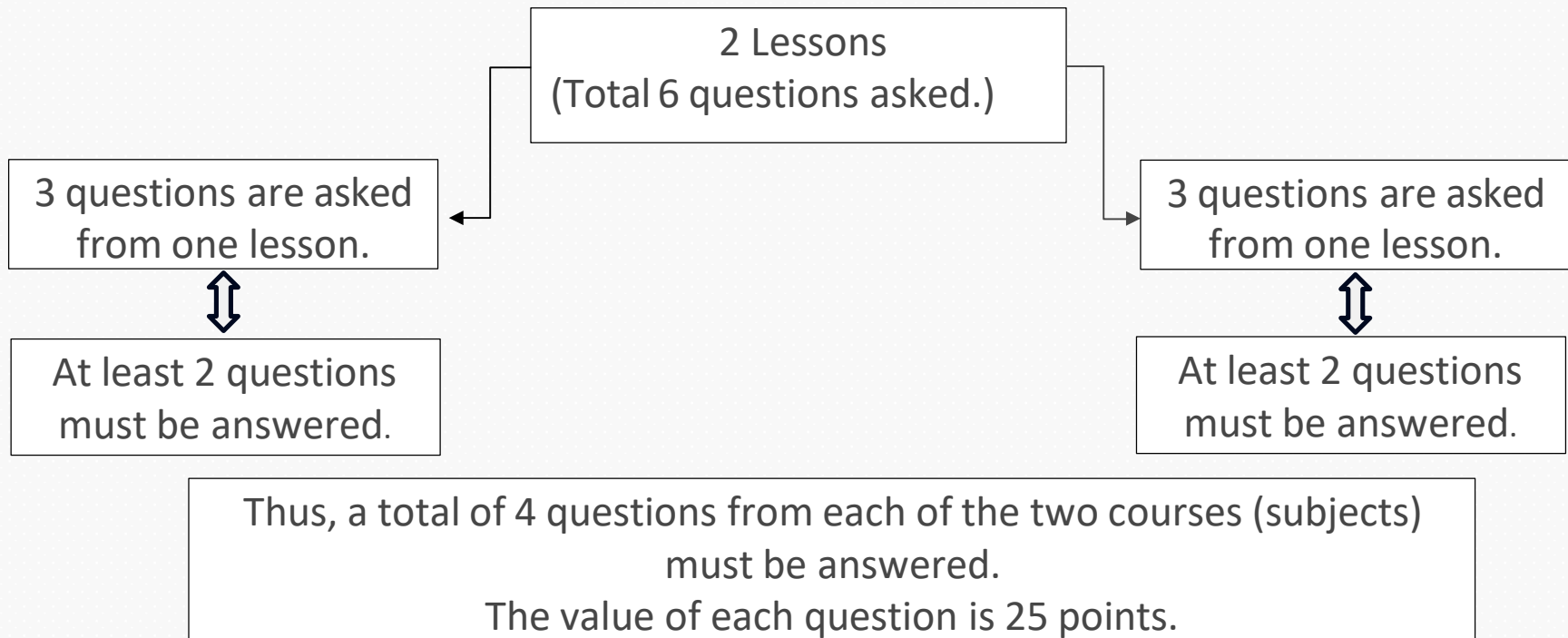
	Courses	Reference Books
1	Linear Algebra	· Elementary Linear Algebra with Applications (9th Edition) by Bernard Kolman and David Hill.
2	Digital Design and Computer Architecture	· Probability, Random Variables and Stochastic Processes (4th Edition) by Athanasios Papoulis
3	Operating Systems	· K.H. Rosen, Discrete Mathematics and its Applications, (Sixth Edition) McGraw-Hill, 2007. · W.K. Grassmann and J.P. Tremblay, Logic and Discrete Mathematics: A Computer Science Perspective, Prentice Hall, 1996.
4	Database Systems	· John E. Hopcroft, Rajeev Motwani, Jeffrey D. Ullman "Introduction to Automata Theory, Languages, and Computation 2E.", Addison Wesley · Sipser, M. (2013). Introduction to the Theory of Computation. Boston, MA: Course Technology. ISBN: 113318779X
5	Artificial Intelligence	· Frank Carrano, Data Abstraction and Problem Solving with C++, Addison Wesley, Fifth Edition, 2007. · Programming Language Concepts and Paradigms, D.A. Watt, Prentice-Hall, 1990 · Robert W. Sebesta , Concepts of Programming Languages.
6	Data Mining, Machine Learning, Deep Learning	· Mark Allen Weiss, Data Structures and Algorithm Analysis in C++ 2nd Ed. Addison Wesley · Frank Carrano, Data Abstraction and Problem Solving with C++, Addison Wesley.
7	Computer Vision and Image Processing	· T. H. Cormen, C. E. Leiserson, and R. L. Rivest, Introduction to Algorithms, The MIT Press / McGraw-Hill Book Company, 1994.

Courses	Reference Books
8 <b>Software Engineering</b>	· Software Engineering (10th edition), Ian Sommerville, Pearson, 2016, ISBN978-0133943030 · Object Oriented Software Engineering: Practical Software Development using UML and Java (2nd edition), Timothy C. Lethbridge and Robert Laganieri, McGraw-Hill, 2005, ISBN 0-07-710908-2
9 <b>Digital Design and Computer Architecture</b>	· David A. Patterson, John L. Hennessy, Computer Organization and Design The Hardware/Software Interface, Morgan Kaufmann Publishers, 1994. · William Stallings, Computer Organization and Architecture, (8th ed.) Printice Hall. · M. Morris Mano, Charles R. Kime, Logic and Computer Design Fundamentals 2nd Edition, Prentice Hall.
10 <b>Operating Systems</b>	· Operating System Concepts, Abraham Silberschatz, Peter B. Galvin, Greg Gagne, ISBN-10: 0470128720 · Modern Operating Systems, A.S. Tanenbaum, Prentice-Hall, ISBN 0-13-595752-4, 1992.
11 <b>Database Systems</b>	· A. Silberschatz, H. Korth, S. Sudarshan, Database System Concepts, Sixth Edition, Mc Graw Hill, 2011. · R. Ramakrishnan, J. Gehrke, Database Management Systems, Third Edition, McGraw-Hill, 2003.
12 <b>Artificial Intelligence</b>	· Stuart Russell and Peter Norvig. Artificial Intelligence: A Modern Approach (4th Edition)
13 <b>Data Mining, Machine Learning, Deep Learning</b>	· Introduction to Machine Learning by Ethem Alpaydin, · Pattern Recognition and Machine Learning by Christopher M. Bishop · Ian Goodfellow and Yoshua Bengio and Aaron Courville, Deep Learning. · Mehmed Kantardzic, Data Mining: Concepts, Models, Methods, and Algorithms 3rd Edition, Wiley-IEEE Press, 2019, 672 pages.
14 <b>Computer Vision and Image Processing</b>	· Richard Szeliski. Computer Vision: Algorithms and Applications. Springer, New York, 2nd edition, 2022. · Antonio Torralba, Phillip Isola, and William Freeman, Foundations of Computer Vision, 2024. · Scott E. Umbaugh, 2005; Computer Imaging: Digital Image Analysis and Processing, A CRC Press Book, Taylor and Francis Group · Rafael Gonzalez and Richard Woods, Digital Image Processing 4th Edition.
15 <b>Computer Networks</b>	· William Stallings, Data and Computer Communications, 7th-10th Edition, Prentice Hall Publ., 2014. · Andrew S. Tanenbaum, “Computer Networks”, 4th/5th Edition, Prentice Hall Publ., 2011The principles and techniques employed in computer and wireless networks; · Douglas E. Comer, (2001), Computer Networks and Internets with Internet application, Prentice Hall.
16 <b>Natural Language Processing</b>	· Dan Jurafsky and James H. Martin. Speech and Language Processing (2024 pre-release). · Jacob Eisenstein. Natural Language Processing. · Yoav Goldberg. A Primer on Neural Network Models for Natural Language Processing.

\*Students must choose any 2 of the Qualification subjects listed

# QE for Electrical-Electronics and Cyber Systems Engineering Program

- QE committee consist of 5 members including advisor (2 members from different universities, 2 from department)
- **Written Exam:**
  - Two topics suitable for the department are selected.
  - 6 questions (3Q/course, 2Q/course have to be answered)
  - 75 is required to take oral exam.



➤ **Oral Exam:**

- Student prepares a survey paper in the relevant research field
- 2 weeks before oral exam, the student delivers the survey paper to committee members
- Evaluation of survey paper: Advisor evaluates 60% and committee evaluates 40% of it.
- Survey paper contributes the 40% of the oral exam grade
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- After presentation, exam will continue as Q&A

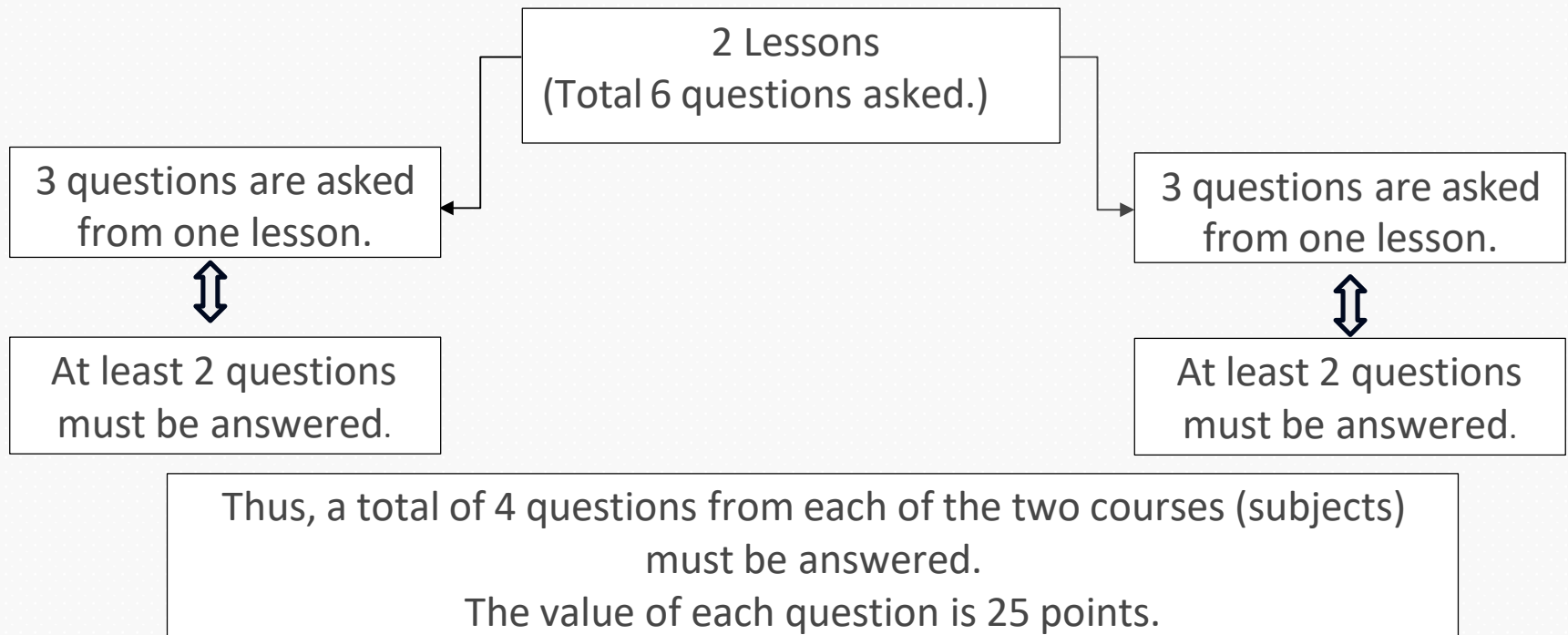
# EECD Course Pool

	Courses	Reference Books
1	Linear Algebra	· Elementary Linear Algebra with Applications (9th Edition) by Bernard Kolman and David Hill.
2	Probability and Random Processes	· Probability, Random Variables and Stochastic Processes (4th Edition) by Athanasios Papoulis
3	Circuit Theory	· C. K. Alexander and M. N. O. Sadiku, Fundamentals of Electric Circuits (6th Edition), McGraw Hill, 2017.
		· J. S. Kang, Electric Circuits (1st Edition), Cengage, 2017.
4	Signals and Systems	· Signals and Systems, Alan V. Oppenheim, Alan S. Willsky, with S. Hamid Nawab, second (new international) edition, 2014, Pearson
5	Communication Systems Fundamentals and Wireless Communication	· Communication Systems 5th Edition by Simon Haykin and Michael Moher, John Wiley & Sons, 2009,
		· Wireless Communications: Principles and Practice by Theodore S. Rappaport (Author)
		· Digital Communications 4th Edition by John Proakis
6	Electromagnetic, RF/Microwave	· David Keun Cheng, Fundamentals of engineering electromagnetics, Pearson, 2014,
		· Fawwaz Ulaby, Umberto Ravaioli, Fundamentals of Applied Electromagnetics, 8th Ed., Pearson, 2020.
		· David M. Pozar, Microwave Engineering, 4 <sup>th</sup> Ed., Wiley, 2012.
7	Electronics	· Sedra/Smith: Microelectronic Circuits, 8E
		· Behzad Razavi: "Fundamentals of Microelectronics", 2nd or 3rd edition.
8	Control Systems	· G.F. Franklin, J.D. Powell, A.Emami-Naeini: Feedback Control of Dynamic Systems (8th Edition), Prentice Hall, 2019.
		· Katsuhiko Ogata: Modern Control Engineering (5th Edition), Prentice Hall, 2010.
		· Norman S. Nise-Control Systems Engineering (8th Edition), 2019

\*Students must choose any 2 of the Qualification subjects listed

# QE for Biomedical Engineering and Bioinformatics Program

- QE committee consist of 5 members including advisor (2 members from different universities, 2 from department)
  - **Written Exam:**
    - Student selects two subjects related with the program
    - 6 questions (3Q/course, 2Q/course have to be answered)
    - 75 is required to take oral exam



## ➤ Oral Exam:

- Student prepares a survey paper in the relevant research field.
- 2 weeks before oral exam, student delivers the survey paper to committee members.
- Evaluation of survey paper: Advisor evaluates 60% and committee evaluates 40% of it.
- Survey paper contributes the 40% of the oral exam grade.
- Student makes 30 min presentation of the survey paper to same committee members.
- After presentation, exam will continue as Q&A.

# BMEB Course Pool

	Courses	Reference Books
1	Biology	<p>*Molecular biology of THE CELL 5th edition by Bruce Alberts, Alexander Johnson, Julian Lewis, Martin Raff, Keith Roberts, and Peter Walter</p> <p>*Essential Cell Biology 4th edition by Bruce Alberts, Dennis Bray, Karen Hopkin, Alexander Johnson, Julian Lewis, Martin Raff, Keith Roberts, and Peter Walter</p> <p>*Medical Cell Biology Third edition edited by Steven R. Goodman</p>
2	Lineer Algebra	* Elementary Linear Algebra by Bernard Kolman and David R. Hill (9th edition)
3	Circuit Theory	Fundamentals of Electric Circuits by Charles K Alexander, Matthew Sadiku
4	Biomedical Instrumentaion	<p>*Introduction to Biomedical Equipment Technology, Fourth Edition, Joseph J. Carr, John M. Brown</p> <p>*Medical Instrumentation, Application and Design, John C. Webster</p>
5	Biomaterials	"Biomaterials Science: An Introduction to Materials in Medicine, B.D. Ratner, A.S. Hoffman, F.J. Schoen, J.E. Lemans, Academic Press
6	Biomechanics	Nihat Özkaya, Margareta Nordin, David Goldsheyder, Dawn Leger: Fundamentals of Biomechanics: Equilibrium, Motion, and Deformation, Springer, 2012
7	Biochemistry	Principles of Biochemistry, 5th Edition Moran, Horton, Scrimgeour & Perry © 2012 Pearson ISBN-13: 9780321707338
8	Physiology	Prof. Dr. Levent Ertuğrul, Physiology (2012) 2. Arthur C. Guyton, John E. Hall, Medical Physiology 11th Edition (2007)
9	Medical Imaging	Fundamentals of Medical Imaging, Paul Suetens, Cambridge

# Bioinformatic Part

10	Algorithms and Theory	Introduction to Algorithms, 3rd Edition 3rd Edition by Thomas H. Cormen, Charles E. Leiserson, Ronald L. Rivest, Clifford Stein
11	Data Structures and Programming Languages	Data Structures and Algorithm Analysis in C++, 2nd edition by Mark Allen Weiss
12	Database Systems	Database systems: The complete book (2nd edition) by Hector Garcia-Molina, Jeffrey D. Ullman and Jennifer Widom
13	Discrete Mathematics	Concrete Mathematics: A foundation for Computer Science, 2nd Edition by Ronald L. Graham and Donald E. Knuth
14	Linear Algebra	* Elementary Linear Algebra by Bernard Kolman and David R. Hill (9th edition)
15	Machine Learning and Pattern Recognition	Pattern Recognition and Machine Learning by Christopher M. Bishop
16	Distributed Systems and Operating Systems	Distributed Systems: Principles and Paradigms (2nd Edition) by Andrew S. Tanenbaum and Maarten Van Steen
17	Formal Languages and Automata	
18	Probability and Statistics	
19	Graph Theory and Computer Networks	Graph Theory by Reinhard Diestel
20	Computer Networks	

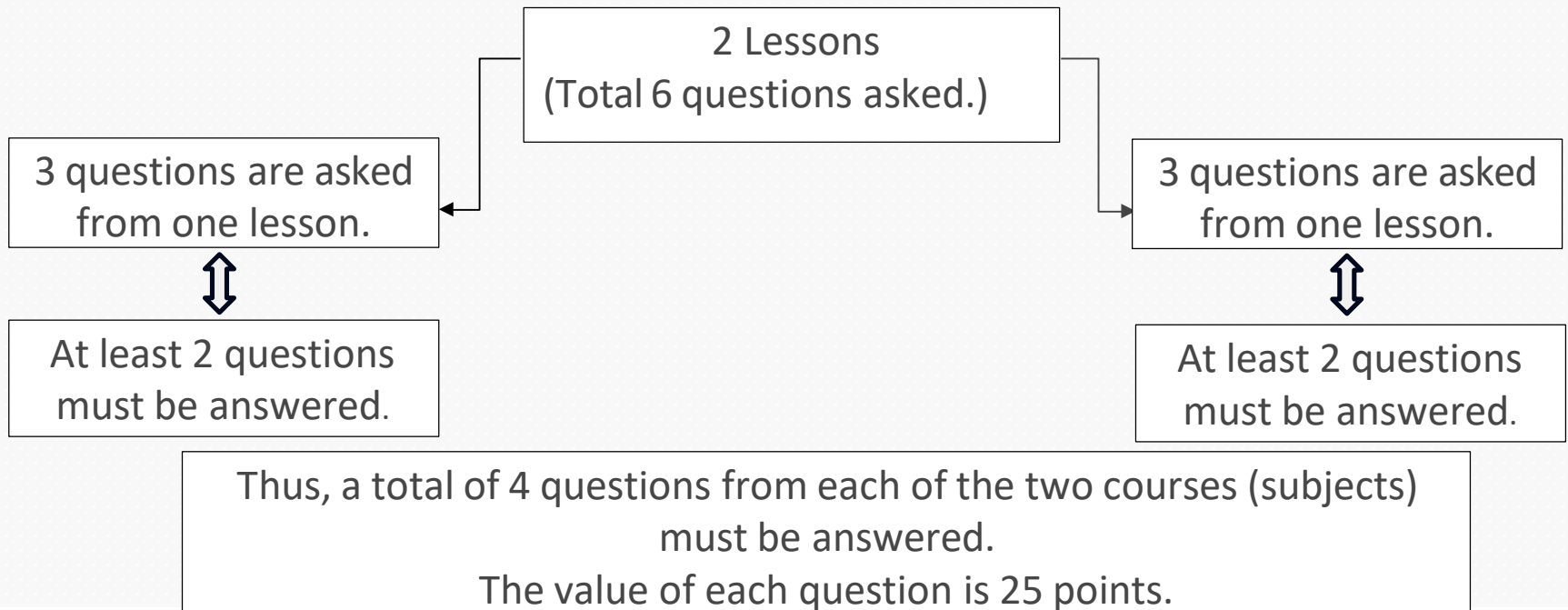
\*Students must choose any 2 of the Qualification subjects listed.

# QE for Health Science Engineering Program

The Qualifying Exam Jury consists of 5 members including the advisor (2 external, 2 internal members).

## ➤ Written Exam:

- - The student chooses 2 topics that are suitable for the department.
- - 6 Questions (3Q/lesson, 2Q/lesson must be answered)
- It is necessary to get at least 75 to pass to the oral exam.



## ➤ Oral Exam:

- Students prepare a literature review related to their research areas.
- 2 weeks before the oral exam, students give the literature review to the jury members.
- Evaluation of the literature review: The advisor evaluates 60% and the jury members evaluate 40%.
- Literature review constitutes 40% of the oral exam grade.
- Students make a 30-minute presentation to the jury members to whom they give the literature review.
- After the presentation, the exam continues in the form of questions and answers.

# QE for Civil Engineering Program

The Qualifying Exam Jury consists of one student's advisor, 2 from the relevant department within the university, and 2 from another university.

**Written Exam:** It is evaluated over 100 points.

- The advisor chooses 2 subject areas that are suitable for the department.
- The advisor asks 2 questions (60 points), the members of the jury one question (40 points).
- The duration of the exam cannot exceed 3 hours.
- Each jury member evaluates his/her own question.

**A minimum score of 75 is required to pass to the oral exam.**

**Oral Exam:** It is evaluated over 100 points.

- The oral exam covers all postgraduate courses that the student has taken within the framework of the Civil Engineering Ph.D. program.
- The exam grade is the arithmetic average of the scores given by the members of the Jury.
- The duration of the oral exam cannot exceed 90 minutes.
- It is necessary to get at least 70 points in order to be successful in the oral exam.

# QE for Construction Management and Law Program

The Qualifying Exam jury consists of five faculty members, at least two of whom are outside the University staff, including the advisor.

- a. Having at least two professors in the jury,
- b. In case one of them is a professor, it is essential that at least two of them be academic holding the title of associate professor.

## **Written exam:**

The student prepares a scientific article in a field defined by his/her advisor during the Preparation of Qualifying Exam. The article must be publishable in a national/ international refereed journal. The student sends the article to the members of the jury at least one week before the doctoral qualifying written exam. The article is evaluated by the jury as a written exam. Students who score at least 70 out of 100 in the written exam are taken to the oral exam. The consultant evaluates 40% and the Committee members evaluate 60%.

## **Oral exam:**

The written exam covers all graduate level courses defined for the program created within the Construction Management and Law Doctorate Program. The student is responsible for all the courses he/she has taken within these courses.

# QE

- Results should be given as written document to GSENS within 3 days.
  - Forms need to be filled
    - Written PhD Qualifying Exam Result [sens.medipol.edu.tr/forms/](https://sens.medipol.edu.tr/forms/)
    - Oral PhD Qualifying Exam Result
- Results can be
  - **Pass:** Follow with thesis proposal and supervision
  - **Fail:** 1 more chance for following semester.



# Thesis Supervision Committee

- After passing QE a thesis supervision committee **will be established within a month.**
- **Thesis Supervision Committee will consist of 3 members**
- Apart from the thesis advisor, the committee will consist of one member each from within and outside of the program/institute.
  - Form needs to be filled:
    - Thesis supervision committee
- If the co-advisor wishes he/she can join the meetings.



[sens.medipol.edu.tr/forms/](https://sens.medipol.edu.tr/forms/)

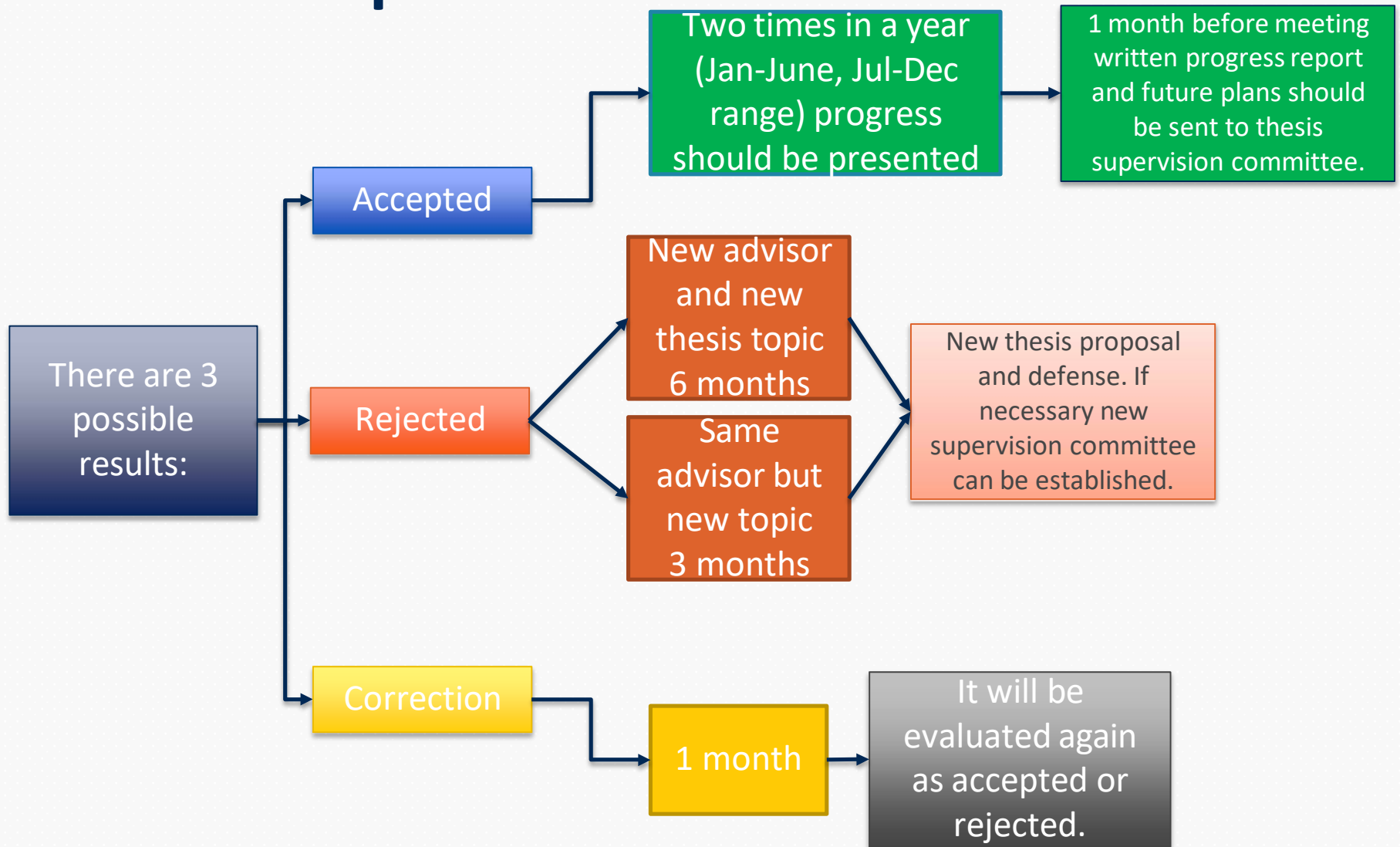
# Thesis Proposal

- After passing QE, within 6 months student presents a thesis proposal to thesis committee.
  - Thesis proposal needs to be written based on the **template provided in GSENS**
    - Scope of work
    - Method
    - Work Plan
- A written document should be submitted to thesis supervision committee members within **15 days before** thesis proposal presentation.
- Written Proposal and the result of thesis proposal defense will be submitted to GSENS as a written document within 3 days.
  - Forms need to be filled:
    - Exam Result

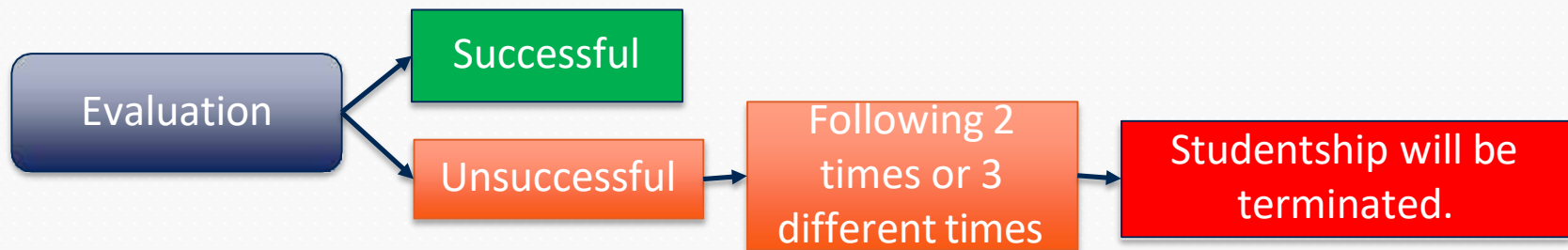


[sens.medipol.edu.tr/forms/](https://sens.medipol.edu.tr/forms/)

# Thesis Proposal



# Thesis Progress Report



- Thesis progress reports should be prepared according to the template prepared by GSENS. This speeds up the student's thesis writing process.
- If student doesn't come to thesis proposal defense without a proper excuse student will be accepted as unsuccessful and proposal will be rejected.
- **Minimum 3 progress reports** should be submitted and presented to thesis supervision committee between acceptance of thesis proposal and PhD dissertation.

# Finalizing Thesis and Graduation (PhD)

- Start planning your defense with your advisor 2 months prior to your expected graduation (defense) day. Be careful about thesis submission deadlines.
- Theses must be written according to the Thesis writing guideline determined by GSENS.
- Completed thesis should be **submitted to advisor** for his/her review. Please provide your advisor time for review like **minimum 2 weeks** before thesis submission.
- **Advisors approves and submits thesis to GSENS along with all required information** for thesis defense like committee members, defense date and time etc...



[sens.medipol.edu.tr/forms/](https://sens.medipol.edu.tr/forms/)

# Finalizing Thesis and Graduation (PhD)

- **In order for the PhD thesis to be defended, the publication condition determined by the University Senate must be met. The student must submit the form with the thesis to GSENS.**
- Forms need to be filled;
  - *Thesis submission form.*
  - *Application to take thesis defense exam.*
  - *Thesis exam committee and defense day form.*
  - *Thesis plagiarism report form.*
  - *PhD Publication Information Form*
- GSENS creates the originality report and sends it along with thesis to advisor and other committee members. Theses with an similarity rate of less than 15% are accepted. The thesis originality report should not be sent to the members of the jury before it is considered successful. This takes 3-4 weeks.
  - Once it is delivered to your thesis committee you have a month to defend it.

# Finalizing Thesis and Graduation (PhD)

## Publication Requirement for PhD-Graduation

Our University Senate convened on 26/01/2021 and made the following decisions.

Decision 1:

In the 20.03.2018 meeting of our university's senate decision numbered 1, 2018/12, the decision taken regarding the publication that is required for the student who has completed the doctoral thesis and wants to defend his/her thesis in front of the jury, has been changed as follows until a new decision is made by considering the pandemic conditions.

Based on the authorization granted by decision 28 (3) of the Istanbul Medipol University Postgraduate Education Regulation published in the Official Gazette dated 14/03/2018 and numbered 30360, in order for the student who has completed his/her doctoral thesis to defend his/her thesis in front of the jury:

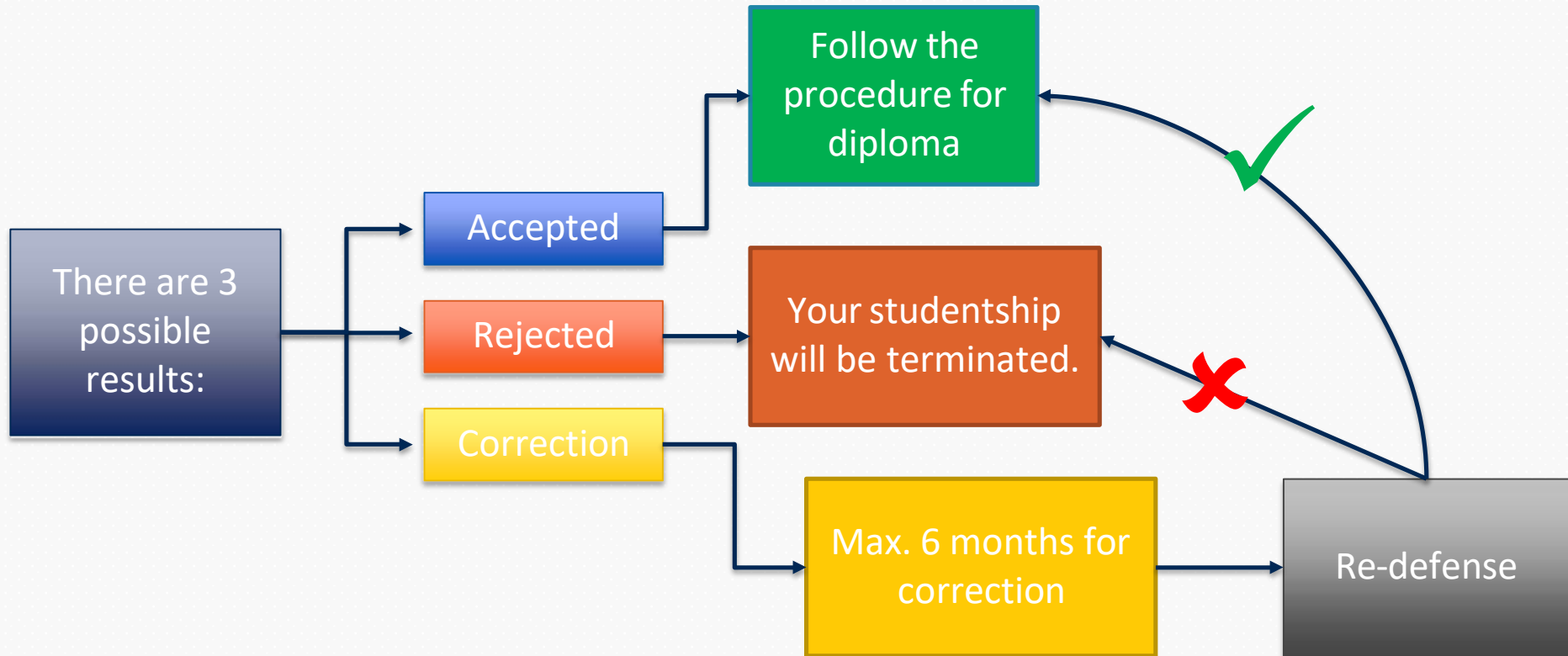
1. In the programs affiliated to the GSENS and the Fundamental Medical Programs affiliated with the Institute of Health Sciences, the publication derived from thesis must be published in the international Journals of the "Web of Science" or "Scopus" database as follow;  
**at least 1 publication in Q2** (quartile 2),  
**or 2 publication Q3**  
**or in addition to 1 publication in Q3 to apply for 1 patent/utility model** (provided that the application is accepted by the Intellectual Rights and Property Board of our University)

For the student of Medical History and Ethics and Health Management program of the Institute of Health Sciences and Construction Management and Law Program of Graduate Schools of Engineering and Natural Sciences, at least one article in the field as first author must have been published or accepted for publication after starting doctoral studies either in the international journals of the "Web of Science" or "Scopus" database or the national peer-reviewed journals listed in ULAKBİM-TR.

# Finalizing Thesis and Graduation (PhD)

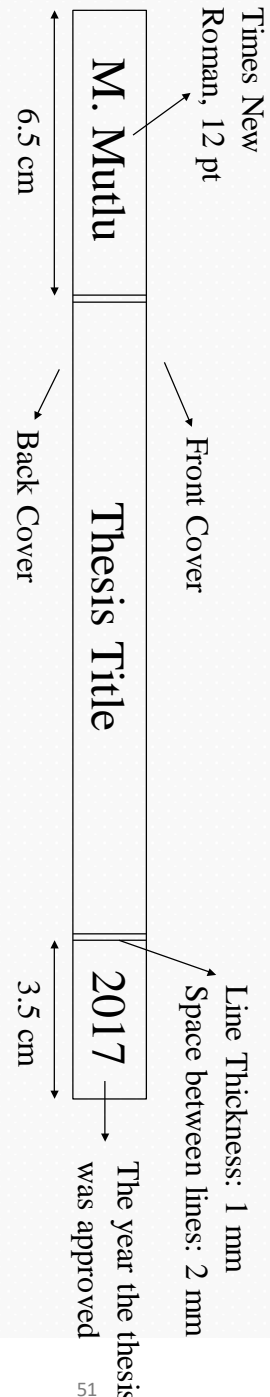
- Thesis committee:
  - 3 members should be from the thesis supervision committee
  - Minimum 2 members from different university
  - In total 5 members.
- The committee conducts the defense exam within 1 month after receiving the student's thesis.

# Defense Exam



# Diploma (PhD)

- The thesis, which has been corrected within a month and prepared **according to the thesis writing guide**, needs to be checked by the relevant GSENS Thesis Control Supervisor and the Thesis Checklist needs to be completed. Before this process, the STUDENT'S ADVISOR MUST REVIEW THE THESIS ONE LAST TIME.
- The thesis, which has been prepared and checked according to the thesis writing guide (2 hard copies containing the signatures of all jury members and the result page of the originality report, and 1 electronic copy as CD) should be submitted to GSENS.
- Graduation date will be the date that student submitted his\her thesis to GSENS.
- If necessary, student can request 1 more month to complete this process.
  - However, after this point, if thesis won't be submitted, student will be passive student and won't be able to use any right of being student. (Immigration office and army for native students)
  - At the end of the max. time for PhD program, studentship will be terminated.



**THESIS TITLE HERE**  
**SECOND LINE IF NECESSARY**  
**THIRD LINE IF NECESSARY, FIT TITLE IN THREE LINES**

**PhD Thesis**

Page Margins: 3 cm from the top and bottom, 2.5 cm from the left and right  
Paper Type: A4 Times New Roman-12 Points  
Logo Size: Height 4 cm, width 10.72 cm.  
From Top to Bottom: Logo 3 cm, thesis title 11 cm, thesis type and name-surname 15 cm,  
Institute and program name 21 cm, date 24 cm

**Graduate School of Engineering and Natural Sciences**

**Graduate Program**

**Month, Year of defense**

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ISTANBUL MEDIPOL UNIVERSITY  
GRADUATE SCHOOL OF ENGINEERING AND NATURAL SCIENCES  
PROCEDURES TO BE MADE AFTER THE THESIS DEFENSE

1. Students who are accepted as successful in the thesis defense exam have to fill the Thesis Data Entry Form online electronically after entering the system (<https://tez.yok.gov.tr/UlusalTezMerkezi/sistemGiris.jsp>) with their own E-Government password. Then, Thesis Data Entry Form will be delivered to the Institute (GSENS) as hard copy by printing out.
2. Students who are successful in the thesis defense exam and fulfilled the other requirements for graduation, they have to submit two hard copies of the thesis signed by the jury and one CD contains PDF version of the thesis within one month after the date of the thesis defense exam to the Institute (GSENS).
3. The name of the electronic PDF file of the thesis in the CD has to be the same Reference No. generated in the Thesis Data Entry Form.
4. The result page of the TURNITIN Originality Report has to be added to thesis as last page of the thesis. The student's advisor should check the thesis before preparing the hard copies. The hard copy of the thesis and the PDF version (CD) must be identical. At this point, the thesis even with small differences can be decided as invalid by the Higher Education Council (YOK) system.
5. The students who submit his/her thesis to the Institute (GSENS) and fulfill the other requirements have to submit Registration Delete Form and the Graduation Letter to the Institute as well to be able to complete official graduation process.
6. Graduate thesis;
  - a) If the patent application for the graduate thesis or the process of obtaining a patent continues; Two years \*Article 6 (1)
  - b) Access to thesis might be postponed for a period of six months if the thesis has the information, findings, new techniques, materials and methods, which have not been published or protected through a patent yet. \*Article 6 (2)
7. Students who wish to make a request for constraint on their thesis, have to apply to Institute (GSENS) with the Thesis Constraint Letter. This application has to be made during the submission of the Thesis Data Entry Form.
8. Student who do not apply with the Thesis Constraint Letter, their thesis will be available online on the National Thesis Center.

*\*The directive on the Collection, Regulation and Opening of Graduate Theses in Electronic Environment.*

