Graduate School of Engineering and Science

Programs, Rules and Regulations

Levent Onural
Director of the Graduate School

16 September 2014
Graduate Programs

Graduate School Web Site:

http://www.bilkent.edu.tr/~mfbe/

See the link:

Graduate School Regulations (in Turkish)

Rules do change:
• A major change in March 2012
• Another major change in Sep 2013
Advisor

• Each grad student must have an appointed advisor
  • Must be a faculty member of the registered department
  • Advisor supervises the thesis work, and more.

• Co-advisors may also be appointed

• Advisors may be changed upon approval
Courses

- Courses must be completed on time

<table>
<thead>
<tr>
<th>Courses</th>
<th>Normal Duration</th>
<th>Max Duration*</th>
<th>Load Courses</th>
<th>Load Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS (Thesis)</td>
<td>2 semesters</td>
<td>4 semesters</td>
<td>8</td>
<td>24</td>
</tr>
<tr>
<td>MS (Non-thesis)</td>
<td>2-3 semesters</td>
<td>6 semesters</td>
<td>10</td>
<td>30</td>
</tr>
<tr>
<td>PhD after BS</td>
<td>4 semesters</td>
<td>6 semesters</td>
<td>16</td>
<td>48</td>
</tr>
<tr>
<td>PhD after MS</td>
<td>2 semesters</td>
<td>4 semesters</td>
<td>8</td>
<td>24</td>
</tr>
</tbody>
</table>

- Those semesters skipped by permission (leave of absence) for health or other reasons are not counted.

- If the course requirements cannot be completed by the “maximum duration”, tuition waiver is discontinued; other scholarships are quite likely to be terminated, as well.
Course Requirements

• Each program has a well defined curriculum
  (See: https://stars.bilkent.edu.tr/homepage/academic_units)

• What must be completed is the CURRICULUM
  • A curriculum may have must courses, as well as, elective courses
    • Elective courses may come from a small set, or a large set

• Additional courses to curriculum may be taken (any grad or undergrad course offered by any Bilkent department)
• Passing grade is at least C for MS, and at least B for PhD.
• CGPA of (only) curriculum courses must be at least 3.00
• GPA has no meaning for grad programs; there is no “standing”.
• CGPA of all taken courses is reported in the transcripts.
# Sample Curriculum

Curriculum of Department of Electrical and Electronics Engineering Faculty Engineering

## Master of Science in Electrical and Electronics Engineering

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Lec.</th>
<th>Lab/Studio</th>
<th>Credits Bilkent</th>
<th>Credits ECTS</th>
<th>Prerequisite</th>
<th>Links</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEE 599</td>
<td>Master's Thesis</td>
<td></td>
<td></td>
<td></td>
<td>56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GE 590</td>
<td>Academic Practices</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Core graduate course</td>
<td></td>
<td>3</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EEE Graduate Seminar</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Graduate Electives (2)</td>
<td></td>
<td>6</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Restricted graduate electives (5)</td>
<td></td>
<td>15</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Elective Courses

- Core graduate course (1)
- Graduate Elective (2)
- EEE Graduate Seminar (1)
- Restricted graduate elective (5)
# Sample Student Curriculum

## Master of Science in Electrical and Electronics Engineering

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Status</th>
<th>Grade</th>
<th>Credits</th>
<th>Semester</th>
<th>Course Taken Instead of Course in the Curriculum</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEE 599</td>
<td>Master's Thesis</td>
<td>Not taken</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GE 690</td>
<td>Academic Practices</td>
<td>Not graded</td>
<td></td>
<td>0</td>
<td>2013-2014 Fall</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Core graduate course</td>
<td>Successful</td>
<td>A-</td>
<td>3</td>
<td>2012-2013 Spring</td>
<td>EEE 511 Telecommunication Electronics</td>
</tr>
<tr>
<td></td>
<td>EEE Graduate Seminar</td>
<td>Not graded</td>
<td></td>
<td>0</td>
<td>2013-2014 Fall</td>
<td>EEE 591 Seminar</td>
</tr>
<tr>
<td></td>
<td>Graduate Elective</td>
<td>Not graded</td>
<td></td>
<td>3</td>
<td>2013-2014 Fall</td>
<td>PHYS 520 Nanoscience and Nanotechnology I</td>
</tr>
<tr>
<td></td>
<td>Graduate Elective</td>
<td>Not taken</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Restricted graduate elective</td>
<td>Successful</td>
<td>A-</td>
<td>3</td>
<td>2012-2013 Spring</td>
<td>EEE 556 Computational Methods in Electromagnetics</td>
</tr>
<tr>
<td></td>
<td>Restricted graduate elective</td>
<td>Successful</td>
<td>B+</td>
<td>3</td>
<td>2012-2013 Spring</td>
<td>EEE 552 Antenna Engineering</td>
</tr>
<tr>
<td></td>
<td>Restricted graduate elective</td>
<td>Not graded</td>
<td></td>
<td>3</td>
<td>2013-2014 Fall</td>
<td>EEE 603 Advanced Electromagnetic Theory I</td>
</tr>
<tr>
<td></td>
<td>Restricted graduate elective</td>
<td>Not graded</td>
<td></td>
<td>3</td>
<td>2013-2014 Fall</td>
<td>EEE 551 Microwave Engineering</td>
</tr>
<tr>
<td></td>
<td>Restricted graduate elective</td>
<td>Not graded</td>
<td></td>
<td>3</td>
<td>2013-2014 Fall</td>
<td>EEE 542 Nonlinear Systems</td>
</tr>
</tbody>
</table>

## Summary of Course Counts

- Total number of courses in the curriculum: 11
- Number of satisfied curriculum requirements: 3
- Total credits of satisfied curriculum requirements: 9
- Number of not graded courses: 6
- Number of courses not taken before: 2
- Number of not satisfied curriculum requirements: 8
Course Requirements

• A course may be repeated as many times as you wish; only the last grade is counted for CGPA

• A course may NOT be replaced by another course

• Each elective course must be APPROVED BY THE ADVISOR

• Each student may freely play with the list of “curriculum courses” and “additional courses” after each semester
  • Provided that the advisor is happy with the resultant elective courses in the curriculum
  • An application (form) is needed to do this.
Course Requirements

- Grad courses completed at other institutions, or at Bilkent, but not counted for a previous diploma, before enrollment to a Bilkent grad program, may be transferred to satisfy curriculum requirements:
  
  - An application and approvals are needed
  - There is a time limit: latest at the end of second semester
  - There is a credit limit: max. half of total credit requirement
  - Bilkent courses are transferred with the grade and the grades affect the CGPA; grades of external courses are given in the transcript, but are not included in the CGPA computation.
Course Requirements

• Students may take courses from other institutions (while enrolled to a Bilkent grad program) to be counted for their course requirements (application and approvals are needed):
  • There are limits on the total of such courses

• Curriculum of a student may be modified in some cases (application and approvals are needed):
  • A must course in the current curriculum that is completed previously at another Bilkent program must be replaced by another course
  • Extra courses completed at the MS program of the same department, may reduce the curriculum requirements of the PhD program:
    • Application and approvals are needed
    • None of the courses move: all still remain in the MS program in the transcript
    • However, those extra MS courses, reduce the PhD curriculum requirements by eliminating matching courses in the PhD curriculum; PhD CGPA is computed over those curriculum courses that still remain in the PhD curriculum
    • Only B or higher grade extra courses during the MS are considered for this purpose; other courses in the MS program, excluding these courses, must still satisfy the MS course requirements
Course Requirements

- **There are other non-credit courses:**
  - Seminar courses (1 for MS with thesis, 1 for PhD after MS, 2 for PhD after BS)
  - Thesis course
    - MS with thesis must register each semester, beginning with the third semester
    - PhD must register each semester, after passing the qualifying exam
    - Not required for non-thesis MS programs
    - Though not required by the regulations, our computerized registration system issues warnings when a student is not registered to any course in a semester. Therefore, it is a recommended practice that students who have completed all curriculum credit course requirements, but not yet passed the qualifying exam, register to the non-credit thesis course in such semesters, if any.

- **Graduate research project course**
  - Only for non-thesis MS students

- **Academic practices**
  - Only exception is the non-thesis MS students; all other students must register each semester and perform the course requirements
## Duration

The expected time to complete the graduate programs are as follows:

<table>
<thead>
<tr>
<th>Expected Duration</th>
<th>Max Duration*</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS (Thesis)</td>
<td>4 semesters</td>
</tr>
<tr>
<td></td>
<td>6 semesters</td>
</tr>
<tr>
<td>MS (Non-thesis)</td>
<td>3 semesters</td>
</tr>
<tr>
<td></td>
<td>6 semesters</td>
</tr>
<tr>
<td>PhD after BS</td>
<td>10 semesters</td>
</tr>
<tr>
<td></td>
<td>14 semesters</td>
</tr>
<tr>
<td>PhD after MS</td>
<td>8 semesters</td>
</tr>
<tr>
<td></td>
<td>12 semesters</td>
</tr>
</tbody>
</table>

* Those semesters skipped by permission (leave of absence) for health or other reasons are ALSO COUNTED for the maximum duration.

- If the program cannot be completed by the “maximum duration”, tuition waiver is discontinued; other scholarships are quite likely to be terminated, as well. However,
  - Scholarships may be extended beyond the maximum duration, upon application, and only if the thesis work is ongoing successfully, TWO MORE additional semesters for MS, and FOUR MORE additional semesters for PhD, beyond the maximum duration, one semester at a time.
Transfer Students

• Entry to a Bilkent grad program by a transfer from another institution is possible:
  • Some courses may be transferred from the old institution to the new Bilkent program
  • Qualifying exams cannot be transferred (must be taken at Bilkent)
  • Time counts start from the beginning of the old program
  • No need for new proofs of required credentials for entry to the new program; old documents submitted during the application to the old program are enough, provided that they satisfy the current entry requirements of the new program.

• Transfers between Bilkent graduate programs are possible:
  • Application and approvals are needed
  • At least one semester in the old program with a minimum of 3.00 GPA
  • There must be enough time left to complete the new program; all times are counted from the beginning of the old program
  • All current entry requirements of the new program must be satisfied at the time of entry to the old program
Qualifying Exam
(Only for PhD)

– Each PhD student must take the qualifying exam latest
  • in the fourth semester, for those PhD students after MS
  • in the sixth semester, for those PhD students after BS

– Qualifying exams have a written and an oral component

– If a student fails his first qualifying exam, he/she has to take it in the following semester
  • Otherwise, the tuition waiver and quite likely all other scholarships, will be discontinued

– Either the department, or the student, may decide for a qualifying exam in an earlier semester than the time limit given above.

– Exam dates are announced by the departments

– No attendance when expected = failure
Thesis Work

• PhD thesis work must result in an original contribution to the scientific knowledge in the field

• PhD thesis work should generate at least one publication in a reputable journal

• The thesis (either MS or PhD) must be successfully defended in front of an appointed jury.
  – The result may be “pass”, “correction” or “fail”.
    • In case of “correction” there is an additional time to correct the thesis (3 mo for MS, 6 mo for PhD)
Thesis Work

• Thesis is the outcome of a research work.
  – A thesis is written after the research work is completed

  – Check the Graduate School web page for a suggested thesis template:
    http://www.bilkent.edu.tr/~mfbe/forms.html

• Some parts of the research work may be conducted at another institution
  – Approvals are needed
  – Student still registers to the thesis course at Bilkent
  – A “leave of absence” should not be requested
    • “Leave of absence” is requested and may be granted only if the student cannot conduct academic work due to some prohibiting reasons. Continuing academic work for the current program at another institution is not a reason for a leave of absence.
Thesis Work
(Only for PhD)

• A thesis tracking committee (tez izleme komitesi, TİK) is formed, by appointment, for each student after the qualifying exam is passed
  – Three faculty members; at least one from another department
  – Advisor is a member of TİK
  – Co-advisors, if any, may attend TİK meetings, but without voting privileges

• A thesis proposal must be submitted to the TİK within six months after passing the qualifying exam
  – There are procedures and remedies if the proposal is not found successful; beware of related time limits
    • Failure to pass the thesis proposal stage on time results in a loss of tuition waiver; it is quite likely that all other scholarships are also discontinued
Thesis Work
(Only for PhD)

• A progress report must be submitted to TİK
  – Two times in a calendar year
    • One between 1 Jan – 30 Jun
    • Another one between 1 Jul – 31 Dec

  – Two consecutive failures or three total failures create problems:
    • Tuition waiver is discontinued; quite likely that all other scholarships are discontinued
Exchange Programs

• Graduate students may participate in student exchange programs

• However
  – Rules related to courses taken at another institution
  – Rules related to research work conducted at another institution
  – Related approval process

  are the same as described here in these slides.

• Additional procedures and paperwork might be needed depending on the governing rules of the specific exchange program
Graduation and Diploma

• A student graduates if
  – all course requirements are satisfied,
  – and the thesis (in those programs with thesis) is prepared, written and successfully defended in front of a jury,
    • and the signed and completed thesis in proper (required) format is submitted to the graduate school, together with related forms

• Graduation is instantenous, once above conditions are satisfied
  – There is a “graduation date”
    • The date the Graduate School acknowledges the Registrar that the student is “graduated”.
  – There is no such thing as the “graduation semester”
  – Those registered courses with no credit are immediately graded upon completing the other program requirements
Graduation and Diploma  
(Only for PhD)

• A student who cannot complete a PhD program for any reason, may get a non-thesis MS diploma, if all of the below conditions are satisfied:
  
  – There is a non-thesis MS program in that department
  – All the requirements of that non-thesis MS program are satisfied at the time of discontinued PhD
  – Application is filed
GE 590/690 Academic Practices

Practice some basic tasks in academic life: teaching, research and service.

• Work closely with an instructor (6-12 hours per week).

• Learn the professional aspects of academic life:
  • How to succeed in research
  • Basics of teaching
  • Service work associated with academic work

Activities include proctoring exams, serving in different committees and evaluation panels, reviewing proposals/papers, giving talks in public meetings/panels, etc.

This course must be taken every semester. Only those who are away from the school (exchange, on leave with permission etc.) will not register during that period, subject to Graduate School approval.
TÜBİTAK Scholarship Programs

- Programs available to Turkish citizen graduate students
- Programs available to non-Turkish citizen graduate students

- Öncelikli alanlar listesine TÜBİTAK 2211 sayfasından ulaşılabilir.
- Öncelikli alanlar ve sanayiye yönelik teşvik bursları için tez önerisinin kabul edilmiş olması gerekir.
- www.tubitak.gov.tr
Graduate School Contacts

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Secretary of the Graduate School: Melis Tokcaer (melistok@bilkent.edu.tr)

Phone: 1208

Web Page: http://www.bilkent.edu.tr/~mfbe

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