Life cycle of a student at METU Cognitive Science:

From application to transfer between degrees, and to project work or thesis

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1. General

This section is about general concerns related to applicants for (1) MS without thesis, (2) MS with thesis, and (3) PhD. These are the degrees offered by our department.

This is not a substitute for METU student handbook, graduation requirements for each degree, or for YOK post-graduate rules. Please always check these official resources for verification. It is meant to give prospective students an understanding of how our acceptance to various programs work, and how they relate to each other, for example transferring from MS without thesis to MS with thesis, or the other way around.

It also explains why in some cases we accept some students to PhD with a preparatory (hazırlık) requirement. Sections below give more detail concerning each program.

The overall goal of the department is to prepare cognitive scientists for scientific research and development, and to raise awareness of cognitive science in the industry, which we think is becoming more relevant than ever. We think that these are not conflicting objectives, but they require different preparation; hence our three different programs.

It works two ways: We pledge to contribute to your understanding of cognitive science: its history, domains, methods, techniques, and its evaluation of theories and models. We expect you to contribute to the department to leverage ourselves for better research, and to raise awareness of cognitive problems in the industry for development.

Cognitive Science's empirical and theoretical investigations cover several fields: Computer Science, Artificial Intelligence, Linguistics, Neuroscience, Psychology, Philosophy, Education and Anthropology. With the advent of Social Cognition, it also extended to social sciences, including e.g. Sociology and Economics. Clearly, one cannot master all of these fields in the lifetime of one degree program, but we expect our students to be prepared to rise above the fields they come from; so that their coming to our department is worth their effort to study complex behaviour of natural or artificial minds or intelligent behaviour from an interdisciplinary perspective.

For that purpose, we expect all our students to combine at least two of the fields above. More the better. This reflects a historical understanding of the fact that complex behaviour is too difficult to pidgeon-hole into one field.

2. The workflow for acceptance to the department

Unless stated otherwise in a period of application, we tend to accept all incoming master's students to Master's Without Thesis Program with hazırlık first; then, depending on up to two-term progress and intent of the students, move them to thesis option if they so desire. This decision can be made earlier if the student wishes to do so, and if there is enough material to evaluate the request.

A committee continuously assesses the progress of students. Therefore it is a two-party decision: the student's desire to do a thesis, and the committee's assessment of the possibility for leading to a thesis. We will inform you of our guidelines. One automatic way to avoid hazırlık is to have a BSc or BA degree in Cognitive Science. Currently, no university in Turkey offers such a degree.

During the hazırlık period, our students are encouraged to take courses (with NI status; to count them later as regular course work) from the regular course list, in addition to the Cognitive Science Primer I-II courses of hazırlık, to see for themselves whether they would like to do a thesis, or develop some application of cognitive science techniques to serve the needs of industrial use. This process also allows them to reduce their future course load when they move to regular work of Master's without thesis or Master's with thesis. Graduating from Master's with thesis requires thesis defence before a jury; graduating from Master's without thesis does not require a thesis defence or jury; a supervisor oversees and assesses a project work and its brief report with the help of a project committee.

We tend to accept qualified students to our PhD program without hazırlık if they have a cognitive science degree. If not, we reserve our option to ask for a hazırlık period (two primer courses; same as above), during which they can take other courses (as NI; to be counted later) to reduce their future course load. This decision is based on assessment of preparedness for cognitive science research. Students move to regular PhD work if they pass the hazırlık courses.

3. The letter of intent (LOI, for all degrees)

This is a very important document for us, which is also required by YOK.

Since this is meant to be a short document, to be read by everyone in the department, we wouldn't waste ink if we were you about describing our early school history, or what we can see from your application records (degrees, prizes, honours, internships, etc.). Therefore we have some suggestions about how to prepare a Letter Of Intent (LOI).

First, we note that, unless you have a degree in cognitive science, we do not expect you to know cognitive science before you apply to us, although certainly this would help in our decision. We welcome complete newcomers to the field.

Second, we would like to see what you have to say personally, rather than say what you think we want to hear.

LOI is your chance to tell us what you cannot do in a 5/10-minute interview, or with transcripts. Please include short descriptions of the following:

a. What brings you to cognitive science?

b. How can we contribute to you? What research and/or development skills do you expect to acquire?

c. How can you contribute to us? What research and/or development skills can we expect you to bring in?

d. (for PhD candidates): What kind of research do you have in mind? We ask for a writing sample from phd applicants. This does not have to be cognitive science related; but, it must be something that shows your academic writing skills and expression of ideas. Published work is preferable because it is usually polished in these respects before publication.

e. Will you be able to allocate time for courses, which tend to require more time in the early terms? (Think twice before you say yes; we will ask you to live up to it in our assessment of your progress.)

f. This is quite a technical field; some combination of math, stats, modeling, testing, experimentation, and programming will be required. Are you prepared for this, or prepared to be prepared?

(Again, please think carefully before you write something about this; we will use it in assessment later; and, you have about two years to come to research level, and two and a half years for development work.)

g. If you have done extra readings or work related to cognitive science, please describe briefly their impact on you for your proposed work here.

We would appreciate if you write LOI as a structured text so that we can identify the points above easily.

4. Master's without thesis

This program is newer than our other programs; so we describe it first. It requires more courses than the thesis option, and some primer courses. We promised the Higher Education Council the following with this program, which we write as in the original document, to better explain our rationale:

"Bu programın beş temel gerekçesi vardır:

1) Bilişsel Bilimler gibi en az dört alanla ilgili olan (bilişim, dilbilim, psikoloji ve felsefe) disiplinlerarası ve disiplinlerötesi konularda Türkiye'de farkındalık yaratacak bol sayıda mezunlar yetiştirmek,

2) çalışan profesyonel kesime iş hayatında yararlı olabilecek yazılım sistemlerinde ve ürün tasarımında zihinsel kısıtların ele alınması gibi beceriler kazandırabilmek,

3) endüstriye katkıyı akademik kariyere devam etme seçeneğine göre önceleyebilecek bir aday kesimine, hem genişlik hem de derinlik sağlayacak dersler sunabilmek, ve bu sayede konunun sanayide de farkında olunmasını sağlamak,

4) halen mevcut olan tezli yüksek lisans programında teze devam etmekte zorluk çeken, çalışan üst düzey profesyonel bir kesime seçenek sunabilmek,

5) 20 Nisan 2016 tarihli ve 29690 sayılı YÖK Lisansüstü Eğitim ve Öğretim Yönetmeliğinin 9.9 maddesine göre, tez jürisinde başarısız olan tezli yüksek lisans öğrencilerine, öğrenci istediği taktirde, ve burada önerdiğimiz mezuniyet şartlarını sağlarsa, tezsiz yüksek lisans diploması verebilmek."

As it can be understood from this statement, we use it to promote awareness and technical skills which are required for professionals to make a niche for cognitive aspects in their business.

We also use it to carefully choose candidates which can go toward a thesis. We accept all incoming students to this program in many cases to see your potentials; it is easy to change programs in the department if you are willing to do so and are qualified.

In other words, this program is probably a terminal degree for some students, and a transitory degree for others, in moving toward a thesis. It depends on you. Since there is no undergraduate degree in cognitive science in Turkey, we felt it necessary to observe progress of potential thesis candidates for a longer period than what one can learn in a very short interview.

It has a hazırlık stage, with two primer courses. During the two terms the students attend these courses, we encourage them to take courses "from above" for regular course work. This way there is great flexibility to either stay in the program and finish the course work in three regular terms allowed by YOK, or move to thesis and better prepare a thesis draft proposal in good detail at the end of first regular term, which is also a YOK requirement. During this time we will let you know of your progress toward a degree with thesis if you wish us to do so.

The transfer from this program to program with thesis, and vice versa, is determined by a departmental decision by the second hazırlık term latest, using criteria we share with you in primer classes. The criteria are solely based on performance, progress, and student's intent.

5. Master's with thesis

This is our oldest program. It requires less courses than the master's without thesis option; therefore if you move to this program from master's without thesis, and if you have taken some of the courses by the time of transfer (most likely the foundational ones), you are in a better position to come up with a thesis proposal at the end of first term after transfer. This also gives you time to get to know research and researcher interests in the department.

We are quite liberal about supervision; you can find other researchers to supervise your work as long as work is cognitive science related. Usually one member of the department accompanies your external supervisor if you choose this way.

In the past we had accepted incoming students to this program directly. That did not prove very successful in coming up with a thesis topic at the end of first year. Now we directly accept only students with a BA/BSc in cognitive science into this program. Others go through a hazırlık period; i.e. they start with master's without thesis.

The reason why master's with thesis program does not have its own hazırlık is because we use the hazırlık period to assess if thesis research will be possible with the candidate.

6. PhD program

This is our program to prepare more researchers and entrepreneurs in cognitive science. We expect world-class contributions from our phd students. We know how to prepare you for this, as long as you are prepared to do so.

If you don't have a degree in cognitive science, we may ask you to go through a hazırlık period (two primer courses), during which you can take regular courses from above (as NI credit; to count later), to see for yourself whether you've made the right choice coming here. We use this period to assess your preparedness for some hard work in cognitive science.

The decision for hazırlık is more complex in the case of PhD program. Our related fields produce great theses, which can be related to cognitive science. If you are not from one of those fields (see the first section), then it is more likely that if you are accepted you will be accepted with hazırlık requirement. If you are from one of those fields, the decision depends on your individual record of course work and early research, and your submitted written piece.

We tend to view course work for PhD as a preliminary for research. The earlier you get into research mood, the better. We revise our qualifiers and other indicators of progress to better and earlier prepare our phd students for research.

7. Summary

We are quite a welcoming department; and, we represent interdisciplinary, multidisciplinary and metadisciplinary work in this university. If you are prepared to combine your own expertise with ours to attack a cognitive science problem, and ready to walk the extra mile to learn a new field, including its foundations and basic methods, this might be the right place for you.