

FOR STUDENTS SUBJECT TO THE FORMER CURRICULUM

TRANSITION GUIDE, COURSE EQUIVALENCY TABLES AND FREQUENTLY ASKED QUESTIONS

Effective from Fall 2026–2027 · Version 1.2

At a glance

- The curriculum under which you are registered does not change. Your graduation requirements are the course and ECTS requirements of your own curriculum.
- For courses that will no longer be offered, you will take the corresponding courses in the new curriculum: BBM → CMP, AIN → AID.
- Courses you have successfully completed remain valid; you do not need to repeat them.
- AIN 401 Senior Seminar has been removed from the curriculum; IST 299 will be taken instead of FIZ 128.
- Review this document with your academic advisor before course registration.
- **Update (Version 1.2): Students subject to the former curriculum must successfully complete at least eight AIN-coded technical electives and/or their AID-coded equivalents. Removed technical-elective laboratories are not replaced one-for-one; instead, their total 20 ECTS load is used as the basis for completion.**

1. Who is this document for?

This document is intended for students enrolled in the Artificial Intelligence Engineering program of the Faculty of Engineering who will register for Semester 2 or a later semester as of Fall 2026–2027. These students will continue to be subject to the (former) curriculum under which they enrolled, and their graduation requirements will be evaluated according to that curriculum.

Students registering for Semester 1 in Fall 2026–2027 are subject to the new Artificial Intelligence and Data Engineering curriculum within the Faculty of Computer and Information Sciences; this document does not apply to them.

2. What changed, in brief?

A new curriculum titled “Artificial Intelligence and Data Engineering” has been introduced within the Faculty of Computer and Information Sciences. Because some courses in the former Artificial Intelligence Engineering curriculum will no longer be offered, their equivalent courses in the new curriculum will be taken instead. The parts of the change that affect you are summarized below:

- BBM-coded compulsory courses → CMP-coded equivalents (Table 1)
- AIN-coded compulsory courses → AID-coded equivalents (Table 2)
- AIN-coded technical electives → AID-coded equivalents (Tables 5 and 6)
- BBM technical-elective requirement → one CMP-coded course from the Faculty Technical Elective pool in Table 10
- FIZ 128 Physics II → IST 299 Probability; AIN 312 → CMP 206 (Table 3)

- AIN 401 Senior Seminar has been removed from the curriculum
- Some AIN-coded technical electives and technical-elective laboratory courses have been removed from the curriculum (Tables 8 and 9)

3. Eight key rules you should know

Rule 1 — Your curriculum does not change, but your technical-elective requirement is updated under the transition rules. The former curriculum to which you are subject and the total graduation load of 240 ECTS remain in force. In addition, you must successfully complete at least eight AIN-coded technical electives and/or their AID-coded equivalents.

Rule 2 — Courses you have passed are preserved. Even if an equivalent course is offered under a new code, you do not need to take it again; the course you passed continues to count toward the relevant requirement.

Rule 3 — For compulsory courses, take the equivalent course; for technical electives, your choice is preserved. If you have not taken a compulsory course or have failed it, you take the new-code equivalent listed in the relevant equivalency table. For technical electives, where permitted by the relevant tables, you may take the equivalent AID course or another course within the same technical-elective requirement/group.

Rule 4 — The procedure depends on the type of course you failed. If you failed a compulsory course, you take its equivalent compulsory course. If you failed a technical elective, in the cases defined by the decision, you may take its equivalent or another course within the same technical-elective group/requirement.

Rule 5 — The course category is preserved. The equivalent of a compulsory course is also compulsory for you; the equivalent of a technical elective counts toward your technical-elective requirement.

Rule 6 — Some AID-coded courses may be taken as technical electives. Students subject to the former curriculum may take the AID-coded courses listed in Tables 4, 5, 6 and 7 toward their technical-elective requirement. By contrast, the AID courses in Table 2 are equivalents of compulsory AIN courses in the former curriculum and satisfy the corresponding compulsory-course requirements.

Rule 7 — You may make up ECTS differences and the ECTS load of removed laboratory courses. The five technical-elective laboratory courses in the former curriculum total 20 ECTS. For each such laboratory course you have already passed, 4 ECTS is deducted from this total. You may complete the remaining ECTS by taking any number of in-area (AID/CMP) or out-of-area electives; there is no one-course-per-lab replacement requirement. Other ECTS differences caused by equivalencies may likewise be completed through appropriate technical electives, Faculty Technical Electives, or non-technical electives.

Rule 8 — Your prerequisites are those of your own curriculum. For courses in your curriculum and their equivalents, the prerequisites and prerequisite chains defined in the curriculum to which you are subject continue to apply. For courses newly defined in the new curriculum that have no equivalent in the former curriculum, the prerequisites defined in the AID curriculum apply.

4. What do the course codes mean?

Code	Meaning	How it applies to you
AIN	Courses in the Artificial Intelligence Engineering program of the Faculty of Engineering (former curriculum)	Courses in your own curriculum

Code	Meaning	How it applies to you
BBM	Courses offered by the Department of Computer Engineering, Faculty of Engineering (former curriculum)	Courses in your own curriculum
AID	Courses in the Artificial Intelligence and Data Engineering program, Faculty of Computer and Information Sciences (new curriculum)	Taken as an equivalent course or technical elective
CMP	Computer Engineering courses in the Faculty of Computer and Information Sciences (new curriculum)	Taken as an equivalent course or Faculty Technical Elective

5. Course equivalency tables

Equivalencies for compulsory courses are given in Tables 1 and 2, other course-specific equivalencies in Table 3, and technical-elective equivalencies in Tables 5 and 6. In the tables below, “T-P-C / ECTS” denotes theoretical hours – practical hours – national credit / ECTS.

Table 1. BBM-coded compulsory courses and their CMP-coded compulsory equivalents

Former-program course (BBM)	T-P-C / ECTS	Equivalent course (CMP)	T-P-C / ECTS
BBM 101 Introduction to Programming I	3-0-3 / 6	CMP 101 Introduction to Programming I	3-0-3 / 6
BBM 103 Introduction to Programming Lab. I	0-2-1 / 4	CMP 103 Introduction to Programming Lab. I	0-2-1 / 3
BBM 102 Introduction to Programming II	3-0-3 / 8	CMP 102 Introduction to Programming II	3-0-3 / 6
BBM 104 Introduction to Programming Lab. II	0-2-1 / 4	CMP 104 Introduction to Programming Lab. II	0-2-1 / 3
BBM 201 Data Structures	3-0-3 / 5	CMP 201 Data Structures	3-0-3 / 5
BBM 203 Software Laboratory I	0-2-1 / 2	CMP 203 Software Laboratory I	0-2-1 / 3
BBM 205 Discrete Structures	3-0-3 / 5	CMP 205 Discrete Structures	3-0-3 / 5
BBM 202 Algorithms	3-0-3 / 4	CMP 202 Algorithms	3-0-3 / 5
BBM 204 Software Laboratory II	0-2-1 / 2	CMP 204 Software Laboratory II	0-2-1 / 3
BBM 242 Computer Systems	3-0-3 / 4	CMP 214 Computer Systems	3-0-3 / 5

Students who have not previously taken the BBM-coded courses in Table 1, or who have failed them, must take the corresponding CMP-coded equivalent courses.

Table 2. AIN-coded compulsory courses and their AID-coded compulsory equivalents

Former-program course (AIN)	T-P-C / ECTS	Equivalent course (AID)	T-P-C / ECTS
AIN 101 Freshman Seminar	1-0-1 / 2	AID 100 AI Orientation	1-0-1 / 1
AIN 211 Principles of Artificial Intelligence	3-2-4 / 6	AID 102 Principles of Artificial Intelligence	3-0-3 / 6
AIN 212 Elements of Data Science	3-0-3 / 6	AID 201 Elements of Data Science	3-0-3 / 6
AIN 214 Data Science Lab.	0-2-1 / 4	AID 203 Data Science Lab.	0-2-1 / 2
AIN 311 Foundations of Machine Learning	3-0-3 / 6	AID 202 Foundations of Machine Learning	3-0-3 / 6

Former-program course (AIN)	T-P-C / ECTS	Equivalent course (AID)	T-P-C / ECTS
AIN 313 Machine Learning Lab.	0-2-1 / 4	AID 204 Machine Learning Lab.	0-2-1 / 2
AIN 200 Computers and Ethics	3-0-3 / 3	AID 390 AI, Technology and Society	2-0-2 / 3
AIN 300 Internship I	0-4-2 / 5	AID 300 Internship I	0-4-2 / 5
AIN 400 Internship II	0-4-2 / 5	AID 400 Internship II	0-4-2 / 5
AIN 479 Project I	0-5-2 / 4	AID 491 Project I	0-6-2 / 6
AIN 480 Project II	0-6-2 / 6	AID 492 Project II	0-6-2 / 6

Students who have not previously taken the AIN-coded courses in Table 2, or who have failed them, must take the corresponding AID-coded equivalent courses.

Table 3. Other course-specific equivalencies

Former course	T-P-C / ECTS	Equivalent course	T-P-C / ECTS	How is it applied?
FIZ 128 Physics II	3-0-3 / 5	IST 299 Probability	3-0-3 / 5	If you have never taken FIZ 128, have failed it, or wish to improve your grade in FIZ 128, you may take IST 299 Probability. IST 299 is deemed to satisfy the graduation requirement arising from FIZ 128.
AIN 312 Formal Languages and Automata Theory	3-0-3 / 6	CMP 206 Formal Languages and Automata Theory	3-0-3 / 5	Compulsory-course equivalency.
AIN 420 Introduction to Deep Learning (technical elective)	3-0-3 / 6	AID 301 Fundamentals of Deep Learning	3-0-3 / 6	If you successfully completed AIN 420, it counts toward your technical-elective requirement; if you failed it, you may take AID 301 or another technical elective.
AIN 422 Practicum in Deep Learning (technical elective)	0-2-1 / 4	AID 303 Deep Learning Lab.	0-2-1 / 2	If you successfully completed AIN 422, it counts toward your technical-elective requirement; if you failed it, you may take AID 303 or another technical elective.

Table 4. AID-coded compulsory courses in the new curriculum (technical electives for you)

Course	T-P-C / ECTS
AID 301 Fundamentals of Deep Learning	3-0-3 / 6
AID 303 Deep Learning Lab.	0-2-1 / 2
AID 311 Signals and Systems	3-0-3 / 5
AID 313 Numerical Computing and Optimization	3-0-3 / 5
AID 312 Machine Learning Software Development and Operations	3-2-4 / 6

These courses are compulsory in the new curriculum; students subject to the former curriculum may take them as technical electives.

Table 5. Equivalencies between AIN-coded technical electives and AID-coded restricted technical electives

Former-program course (AIN)	Equivalent course (AID)
AIN 423 Data Intensive Applications	AID 441 Big Data Analytics and Mining
AIN 427 Introduction to Data Mining	AID 441 Big Data Analytics and Mining
AIN 431 Introduction to Computer Vision	AID 401 Fundamentals of Computer Vision
AIN 440 Introduction to Natural Language Processing	AID 421 Fundamentals of Natural Language Processing
AIN 451 Introduction to Robotics	AID 461 Introduction to Robotics

All courses are 3-0-3 / 6 ECTS. For students subject to the former curriculum, these courses count as technical electives.

Table 6. Equivalencies between AIN-coded technical electives and AID-coded technical electives

Former-program course (AIN)	T-P-C / ECTS	Equivalent course (AID)	T-P-C / ECTS
AIN 411 Introduction to Bioinformatics	3-0-3 / 6	AID 481 Fundamentals of Bioinformatics	3-0-3 / 6
AIN 423 Data Intensive Applications	3-0-3 / 6	AID 441 Big Data Analytics and Mining	3-0-3 / 6
AIN 427 Introduction to Data Mining	3-0-3 / 6	AID 441 Big Data Analytics and Mining	3-0-3 / 6
AIN 447 Fundamentals of Text Mining	3-0-3 / 6	AID 442 Fundamentals of Text Mining	3-0-3 / 6
AIN 428 Information Retrieval	3-0-3 / 6	AID 443 Information Retrieval	3-0-3 / 6
AIN 431 Introduction to Computer Vision	3-0-3 / 6	AID 401 Fundamentals of Computer Vision	3-0-3 / 6
AIN 434 Fundamentals of Computational Photography	0-2-1 / 4	AID 402 Fundamentals of Computational Photography	3-0-3 / 6
AIN 440 Introduction to Natural Language Processing	3-0-3 / 6	AID 421 Fundamentals of Natural Language Processing	3-0-3 / 6
AIN 450 Dynamical Systems	3-0-3 / 6	AID 462 Dynamical Systems	3-0-3 / 6
AIN 451 Introduction to Robotics	3-0-3 / 6	AID 461 Introduction to Robotics	3-0-3 / 6
AIN 454 Fundamentals of Cognitive Robotics	3-0-3 / 6	AID 464 Fundamentals of Cognitive Robotics	3-0-3 / 6
AIN 455 Introduction to Human-Robot Interaction	3-0-3 / 6	AID 466 Introduction to Human-Robot Interaction	3-0-3 / 6
AIN 463 Autonomous Multiagent Systems	3-0-3 / 6	AID 463 Autonomous Multiagent Systems	3-0-3 / 6

Former-program course (AIN)	T-P-C / ECTS	Equivalent course (AID)	T-P-C / ECTS
How is Table 6 applied? • You must successfully complete at least eight courses in total from the AIN-coded courses and their AID-coded technical-elective equivalents listed in Table 6. • If you have not previously taken an AIN-coded elective, you may take its AID-coded equivalent. • If you failed an AIN-coded course, you may take its AID-coded equivalent or another technical elective in the same group. • AIN-coded courses you have already successfully completed count toward the technical-elective requirement of the relevant course group. • In all cases, you must complete the number of technical electives and the ECTS load prescribed by the curriculum to which you are subject.			

Table 7. AID-coded technical electives with no equivalent in the former curriculum

AID 411 Generative AI	AID 465 Sampled Data Systems
AID 412 Artificial Neural Networks	AID 467 State Estimation in Robotics
AID 490 Research for AI	

All courses are 3-0-3 / 6 ECTS. You may take these courses toward your technical-elective requirement.

Table 8. AIN-coded technical electives removed from the curriculum

AIN 412 Introduction to Medical Image Analysis	AIN 430 Fundamentals of Image Processing
AIN 413 Machine Learning for Healthcare	AIN 441 Fundamentals of Speech and Voice Recognition
AIN 421 Fuzzy Logic	AIN 461 Logic Programming
AIN 424 Introduction to Deep Reinforcement Learning	AIN 462 Fundamentals of Decision Making

All courses are 3-0-3 / 6 ECTS. These courses will no longer be offered from Fall 2026–2027 onward.

Table 9. AIN-coded technical-elective laboratory courses removed from the curriculum

AIN 414 Practicum in Medical Image Analysis	AIN 432 Practicum in Image Processing
AIN 425 Practicum in Data Intensive Applications	AIN 433 Practicum in Computer Vision
AIN 426 Practicum in Deep Reinforcement Learning	AIN 435 Practicum in Computational Photography
AIN 429 Data Mining Laboratory	AIN 442 Practicum in Natural Language Processing
AIN 453 Practicum in Robotics	AIN 457 Practicum in Human-Robot Interaction

All courses are 0-2-1 / 4 ECTS and will no longer be offered from Fall 2026–2027 onward. The five laboratory courses correspond to a total of 20 ECTS. For each laboratory course you have already passed, 4 ECTS is deducted from this total; the remaining ECTS may be completed through in-area or out-of-area electives. There is no requirement to take one replacement course for each removed laboratory.

Table 10. CMP-coded Faculty Technical Electives that may be taken in place of the BBM technical elective

CMP 401 Algorithm Analysis	CMP 402 Theory of Computation
CMP 403 Combinatorics and Graph Theory	CMP 404 Fundamentals of Compiler Construction
CMP 405 Computer Graphics	CMP 406 Game Technologies
CMP 411 Advanced Computer Architectures	CMP 412 Parallel Processing

CMP 413 Microprocessors	CMP 414 Introduction to High Performance Computing
CMP 421 Data Communications	CMP 422 Computer Networks
CMP 423 Computer and Network Security	CMP 424 Wireless and Mobile Networks
CMP 431 Embedded Systems	CMP 432 Distributed Systems
CMP 433 Fundamentals of Blockchain	CMP 441 Information Security
CMP 442 Social and Economic Networks	CMP 443 Management Information Systems
CMP 451 Software Requirements	CMP 452 Software Architectures
CMP 453 Software Development	CMP 454 Software Quality Assurance
CMP 455 Software Security	CMP 461 Database Management Systems
CMP 332 Operating Systems (3-0-3 / 5)	CMP 352 Software Engineering (3-0-3 / 5)

Unless otherwise stated, all courses are 3-0-3 / 6 ECTS. The single BBM-coded technical-elective requirement in your curriculum is satisfied by taking one course from this pool. If you have already successfully completed a BBM-coded technical elective, it counts toward this requirement; if you failed one, you may take another course from this pool.

6. Prerequisites and courses to be taken concurrently

For courses in your own curriculum, the prerequisite chains defined in the curriculum to which you are subject continue to apply. If you take an AID-coded course that was newly introduced in the new curriculum and has no equivalent in the former curriculum, the prerequisites listed below apply. If you have successfully completed the BBM-coded equivalent (Table 1) of a CMP-coded prerequisite, or the AIN-coded equivalent (Table 2) of an AID-coded prerequisite, you are considered to have satisfied that prerequisite.

Table 11. Prerequisites for AID- and CMP-coded courses

Course	Prerequisite(s)
AID 311 Signals and Systems	MAT 124 + MAT 254
AID 312 Machine Learning Software Development and Operations	AID 202
AID 313 Numerical Computing and Optimization	MAT 124 + MAT 254
AID 411 Generative AI	AID 301
AID 412 Artificial Neural Networks	CMP 101 + CMP 103
AID 465 Sampled Data Systems	AID 311
AID 467 State Estimation in Robotics	AID 311
AID 490 Research for AI	AID 202 + AID 204

In the prerequisite notation, “+” means that both courses are prerequisites.

Courses that must be taken in the same semester

Course	Must be taken in the same semester
AID 201 Elements of Data Science	AID 203 Data Science Lab.
AID 202 Foundations of Machine Learning	AID 204 Machine Learning Lab.
AID 301 Fundamentals of Deep Learning	AID 303 Deep Learning Lab.
CMP 101 Introduction to Programming I	CMP 103 Introduction to Programming Laboratory I
CMP 102 Introduction to Programming II	CMP 104 Introduction to Programming Laboratory II

Course	Must be taken in the same semester
CMP 201 Data Structures	CMP 203 Software Laboratory I
CMP 202 Algorithms	CMP 204 Software Laboratory II

7. Frequently asked questions

1. Which curriculum am I subject to? Have I been transferred to the new program?

No. You remain subject to the curriculum under which you enrolled. The courses and ECTS load you must complete for graduation are determined by that curriculum. You take courses from the new curriculum only through equivalency rules or as technical electives.

2. Do I need to repeat courses I have already passed?

No. Courses you have successfully completed remain valid. Even if an equivalent course is offered under a new code, you do not need to take it again.

3. I never took a course in the former curriculum and it is no longer offered. What should I do?

If it is a compulsory course, take its equivalent from the relevant equivalency table (Tables 1, 2 and 3). For example, take CMP 201 instead of BBM 201 and AID 201 instead of AIN 212.

4. I failed a course. Can I retake the same course?

If the course you failed is compulsory and is no longer offered, take its designated equivalent compulsory course. If the course you failed is a technical elective, in the cases defined by the decision you may take another technical elective within the same technical-elective group/requirement instead of its equivalent.

5. I did not take FIZ 128 Physics II, failed it, or want to improve my grade. What should I do?

You may take IST 299 Probability (3-0-3 / 5 ECTS) instead of FIZ 128 (Table 3). This applies if you never took FIZ 128, failed it, or wish to improve the grade you previously received in FIZ 128. IST 299 is deemed to satisfy the graduation requirement arising from FIZ 128.

6. I did not take AIN 401 Senior Seminar. Can I still graduate?

AIN 401 Senior Seminar has been removed from the curriculum as of Fall 2026–2027. If you have not taken this course, you do not need to take it for graduation. If this creates an ECTS shortfall, you may make it up using the options described in Rule 7.

7. How should I complete AIN 312 Formal Languages and Automata Theory?

Its equivalent in the new curriculum is CMP 206 Formal Languages and Automata Theory (3-0-3 / 5 ECTS) (Table 3). If you have not taken AIN 312 or have failed it, you will take CMP 206.

8. How do I satisfy the “BBM Technical Elective” requirement in my curriculum?

You satisfy this requirement by taking one CMP course from the Faculty Technical Elective pool in Table 10. If you have already successfully completed a BBM technical elective, it counts toward this requirement. If you failed a BBM technical elective, you may take another course from the pool in Table 10.

9. May I take AID-coded courses? Which requirements do they satisfy?

Yes, but not all AID courses have the same status. AID 301, AID 303, AID 311, AID 312 and AID 313 in Table 4; the AID technical electives covered by Tables 5 and 6; and the AID courses in Table 7 that have no equivalent in the former curriculum may be taken toward your technical-elective requirement. The AID

courses in Table 2, however, are equivalents of compulsory AIN courses in the former curriculum and satisfy the corresponding compulsory-course requirements.

10. My curriculum includes “AIN Technical Elective Lab.” courses, but these laboratories have been removed. What should I do?

The five AIN technical-elective laboratory courses in the former curriculum correspond to a total of 20 ECTS. These laboratories will no longer be offered, and no one-to-one equivalent is defined for each of them. For every technical-elective laboratory course you have already passed, 4 ECTS is deducted from the 20-ECTS laboratory load. You may complete the remaining ECTS with any number of in-area (AID/CMP) or out-of-area elective courses. For example, if you have already passed three laboratory courses, you have completed 12 ECTS of this requirement and must complete the remaining 8 ECTS with suitable course(s).

11. The equivalent course has fewer ECTS credits. How do I make up the difference?

If, despite completing all compulsory and elective requirements, you have an ECTS shortfall caused by the curriculum transition, you may make up the difference by taking AID-coded technical electives in Tables 6 and 7, Faculty Technical Electives in Table 10, or nontechnical electives.

12. I successfully completed AIN 420 and AIN 422. How will they count?

These courses count toward the technical-elective requirements of the curriculum to which you are subject (Table 3). If you failed either course, you may take AID 301 or AID 303 respectively, or another course within your technical-elective requirement.

13. What happens to my internship and project courses?

AIN 300 Internship I and AIN 400 Internship II are equivalent to AID 300 and AID 400, respectively; AIN 479 Project I and AIN 480 Project II are equivalent to AID 491 and AID 492, respectively. If you have not taken these courses or have failed them, you will take the corresponding AID-coded equivalents.

14. Have my prerequisites changed?

For courses in your own curriculum, the prerequisites of the curriculum to which you are subject continue to apply. If you take an AID-coded course in the new curriculum that has no equivalent in the former curriculum, the prerequisites in Table 11 apply. If you have successfully completed the BBM equivalent of a CMP prerequisite or the AIN equivalent of an AID prerequisite, you are considered to have satisfied that prerequisite.

15. Do some courses have to be taken together in the same semester?

Yes. A compulsory theory course and its paired laboratory course must be taken in the same semester. For example, AID 201 with AID 203, AID 202 with AID 204, and AID 301 with AID 303. The full list is provided in Section 6.

16. Can I transfer to the new Artificial Intelligence and Data Engineering program?

The curriculum-change decision defines equivalency rules for students subject to the former curriculum; it does not automatically transfer you to the new program. If you wish to request such a change, please contact the department chair's office.

17. What technical-elective and ECTS requirements must I complete for graduation?

In addition to completing 240 ECTS in total, you must satisfy the course-category requirements defined by the transition rules. You must successfully complete at least eight AIN-coded technical electives and/or their AID-coded equivalents, and you must also satisfy the single BBM/CMP Faculty Technical Elective requirement. For the five removed technical-elective laboratory courses, deduct 4 ECTS for each laboratory

you have already passed from the total 20-ECTS laboratory load and complete the remaining ECTS through in-area or out-of-area electives.

19. I cannot see the AID or CMP course I need in the registration system. What should I do?

If a course you need to take under the equivalency rules is not visible in the registration system, contact your academic advisor and the department office during registration week. Including a screenshot and the course code in your request will help speed up the process.

20. My situation is not covered in this document. Whom should I contact?

First contact your academic advisor, and then the department chair's office if needed. This document is provided for information only; the relevant board decisions and the provisions of the Hacettepe University Regulation on Associate and Undergraduate Education and Examinations are binding.

8. Checklist before course registration

- Open your transcript and mark the courses you have successfully completed.
- List the compulsory courses in your curriculum (Appendix A) that you have never taken or have failed.
- For each of these courses, identify the equivalent in Tables 1, 2 and 3.
- **Count your technical electives and determine how many courses remain so that you complete at least eight AIN-coded technical electives and/or their AID-coded equivalents.**
- For missing technical electives, determine which courses you will take using Tables 6, 7 and 4.
- Satisfy your BBM technical-elective requirement with one course from Table 10.
- For any AID-coded course you plan to take that has no equivalent in the former curriculum, verify that you satisfy the prerequisites in Table 11.
- **Calculate the remaining ECTS load from the removed technical-elective laboratories by subtracting 4 ECTS for each laboratory course you have already passed from the total 20 ECTS; complete the remainder through in-area or out-of-area electives.**
- Calculate your total ECTS; if there is a shortfall, make it up using the options in Rule 7.
- Review and confirm your plan with your academic advisor.

Appendix A. Former curriculum (Artificial Intelligence Engineering, AIN)

This appendix contains the semester-by-semester course plan of the curriculum to which you are subject. The “Status / Equivalency” column shows the corresponding course in the new curriculum or the current status of the course. Each semester has a total load of 30 ECTS; the program total is 240 ECTS.

T: theoretical hours · P: practical hours · C: national credit · ECTS: European Credit Transfer and Accumulation System credits

Semester 1

Course Code and Name	T	P	C	ECTS	Status / Equivalency
BBM 101 Introduction to Programming I	3	0	3	6	Equivalent to CMP 101
BBM 103 Introduction to Programming Laboratory I	0	2	1	4	Equivalent to CMP 103
MAT 123 Mathematics I	4	2	5	6	—
FİZ 127 Physics I	3	0	3	5	—
AIN 101 Freshman Seminar	1	0	1	2	Equivalent to AID 100
İNG 111 Language Skills I	3	0	3	3	—
TKD 103 Turkish I	2	0	2	2	International students: TRK 117
BEB 650 Basic Information and Communication Technologies	0	2	1	2	—

Semester 2

Course Code and Name	T	P	C	ECTS	Status / Equivalency
BBM 102 Introduction to Programming II	3	0	3	8	Equivalent to CMP 102
BBM 104 Introduction to Programming Laboratory II	0	2	1	4	Equivalent to CMP 104
MAT 124 Mathematics II	4	2	5	6	—
FİZ 128 Physics II	3	0	3	5	IST 299 Probability: for students who did not take, failed, or wish to improve the grade
FİZ 117 General Physics Lab.	0	3	1	2	—
İNG 112 Language Skills II	3	0	3	3	—
TKD 104 Turkish II	2	0	2	2	International students: TRK 118

Semester 3

Course Code and Name	T	P	C	ECTS	Status / Equivalency
BBM 201 Data Structures	3	0	3	5	Equivalent to CMP 201
BBM 203 Software Laboratory I	0	2	1	2	Equivalent to CMP 203
BBM 205 Discrete Structures	3	0	3	5	Equivalent to CMP 205

Course Code and Name	T	P	C	ECTS	Status / Equivalency
İST 292 Statistics	3	0	3	5	—
AİT 203 Atatürk's Principles and History of Revolution I	2	0	2	2	—
MÜH 103 Occupational Health and Safety I	1	0	1	1	—
AIN 212 Elements of Data Science	3	0	3	6	Equivalent to AID 201
AIN 214 Data Science Lab.	0	2	1	4	Equivalent to AID 203

Semester 4

Course Code and Name	T	P	C	ECTS	Status / Equivalency
BBM 202 Algorithms	3	0	3	4	Equivalent to CMP 202
BBM 204 Software Laboratory II	0	2	1	2	Equivalent to CMP 204
BBM 242 Computer Systems	3	0	3	4	Equivalent to CMP 214
AIN 211 Principles of Artificial Intelligence	3	2	4	6	Equivalent to AID 102
MAT 254 Fundamental Linear Algebra	3	0	3	4	—
AIN 200 Computers and Ethics	3	0	3	3	Equivalent to AID 390
AİT 204 Atatürk's Principles and History of Revolution II	2	0	2	2	—
MÜH 104 Occupational Health and Safety II	1	0	1	1	—
Nontechnical Elective	3	0	3	4	—

Semester 5

Course Code and Name	T	P	C	ECTS	Status / Equivalency
AIN 300 Internship I	0	4	2	5	Equivalent to AID 300
AIN 311 Foundations of Machine Learning	3	0	3	6	Equivalent to AID 202
AIN 313 Machine Learning Lab.	0	2	1	4	Equivalent to AID 204
AIN Technical Elective	3	0	3	6	Table 6 / 7 / Appendix B
BBM Technical Elective	3	0	3	6	One CMP course from Table 10
Nontechnical Elective	3	0	3	3	—

Semester 6

Course Code and Name	T	P	C	ECTS	Status / Equivalency
AIN 312 Formal Languages and Automata Theory	3	0	3	6	Equivalent to CMP 206
AIN Technical Elective	3	0	3	6	Table 6 / 7 / Appendix B

Course Code and Name	T	P	C	ECTS	Status / Equivalency
AIN Technical Elective Lab.	0	2	1	4	See FAQ 10: remaining laboratory ECTS load
AIN Technical Elective	3	0	3	6	Table 6 / 7 / Appendix B
AIN Technical Elective Lab.	0	2	1	4	See FAQ 10: remaining laboratory ECTS load
Nontechnical Elective	3	0	3	4	—

Semester 7

Course Code and Name	T	P	C	ECTS	Status / Equivalency
AIN 400 Internship II	0	4	2	5	Equivalent to AID 400
AIN 401 Senior Seminar	0	2	1	1	Removed from the curriculum
AIN 479 Project I	0	5	2	4	Equivalent to AID 491
AIN Technical Elective	3	0	3	6	Table 6 / 7 / Appendix B
AIN Technical Elective	3	0	3	6	Table 6 / 7 / Appendix B
AIN Technical Elective Lab.	0	2	1	4	See FAQ 10: remaining laboratory ECTS load
Nontechnical Elective	3	0	3	4	—

Semester 8

Course Code and Name	T	P	C	ECTS	Status / Equivalency
AIN 480 Project II	0	6	2	6	Equivalent to AID 492
AIN Technical Elective	3	0	3	6	Table 6 / 7 / Appendix B
AIN Technical Elective Lab.	0	2	1	4	See FAQ 10: remaining laboratory ECTS load
AIN Technical Elective	3	0	3	6	Table 6 / 7 / Appendix B
AIN Technical Elective Lab.	0	2	1	4	See FAQ 10: remaining laboratory ECTS load
Nontechnical Elective	3	0	3	4	—

About nontechnical electives

- There is no language restriction for nontechnical electives; you may also take courses offered in Turkish.
- You may also take nontechnical electives from the SEC pool. Students enrolled in or after Fall 2017–2018 may take at most three SEC courses during their undergraduate studies.
- For the current list, consult the relevant departments' web pages and secmeli.hacettepe.edu.tr.

Appendix B. Former AIN technical-elective pool and current status

The list below shows the AIN-coded technical-elective pool in your curriculum, grouped by cluster. Each course is accompanied by its equivalent in the new curriculum or an indication that it has been removed from the curriculum.

Perception and Language Cluster

AIN 430 Fundamentals of Image Processing (removed)
AIN 432 Practicum in Image Processing (removed)
AIN 431 Introduction to Computer Vision → AID 401
AIN 433 Practicum in Computer Vision (removed)
AIN 434 Fundamentals of Computational Photography → AID 402
AIN 435 Practicum in Computational Photography (removed)
AIN 440 Introduction to Natural Language Processing → AID 421
AIN 442 Practicum in Natural Language Processing (removed)
AIN 441 Fundamentals of Speech and Voice Recognition (removed)

Big Data and Machine Learning Cluster

AIN 420 Introduction to Deep Learning → AID 301
AIN 422 Practicum in Deep Learning → AID 303
AIN 421 Fuzzy Logic (removed)
AIN 423 Data Intensive Applications → AID 441
AIN 425 Practicum in Data Intensive Applications (removed)
AIN 424 Introduction to Deep Reinforcement Learning (removed)
AIN 426 Practicum in Deep Reinforcement Learning (removed)
AIN 427 Introduction to Data Mining → AID 441
AIN 429 Data Mining Laboratory (removed)
AIN 447 Fundamentals of Text Mining → AID 442
AIN 428 Information Retrieval → AID 443
AIN 461 Logic Programming (removed)

Decision Making and Robotics Cluster

AIN 450 Dynamical Systems → AID 462
AIN 462 Fundamentals of Decision Making (removed)
AIN 451 Introduction to Robotics → AID 461
AIN 453 Practicum in Robotics (removed)
AIN 454 Fundamentals of Cognitive Robotics → AID 464
AIN 463 Autonomous Multiagent Systems → AID 463

AIN 455 Introduction to Human-Robot Interaction → AID 466
AIN 457 Practicum in Human-Robot Interaction (removed)

Medical Artificial Intelligence Cluster

AIN 411 Introduction to Bioinformatics → AID 481
AIN 412 Introduction to Medical Image Analysis (removed)
AIN 414 Practicum in Medical Image Analysis (removed)
AIN 413 Machine Learning for Healthcare (removed)

About this document

This document has been prepared to inform students, based on the Education Commission decision concerning the Artificial Intelligence and Data Engineering curriculum change.

For questions, please contact your academic advisor or the department chair's office.