UNIVERSITA' DEGLI STUDI DI MILANO
PROGRAMME DESCRIPTION - ACADEMIC YEAR 2024/25
IN
ECONOMICS: BEHAVIOR, DATA AND POLICY (Classe L-33 R)
Immatricolati dall'a.a. 2024/2025

HEADING

Degree classification - Denomination and code: L-33 R
Degree title: Dottore
Length of course: 3 years
Total number of credits required to complete programme: 180
Course years currently available: 1°
Access procedures: Cap on student numbers, student selection based on entrance test
Course code: B29

PERSONS/ROLES

Degree Course website
https://econ.cdl.unimi.it

Didactic Secretariat
7, Via Conservatorio, Milan Email: econ@unimi.it

Student Registrar
9/1, Via S. Sofia, Milan Tel. +39 02 5032 5032 https://www.unimi.it/en/study/student-services/welcome-desk-informastudenti

CHARACTERISTICS OF DEGREE PROGRAMME

General and specific learning objectives
The Bachelor's Degree Programme in Economics: Behavior, Data and Policy is a three-year programme, entirely taught in English, that aims to provide a basic but solid knowledge of economic theory, its principles, and its quantitative and statistical tools. This knowledge is aimed at developing the ability to produce analysis and research in all the fields of economics. Students will acquire the ability to analyze the behavioral mechanisms that lead individuals to make decisions that influence the organization and functioning of markets. At the same time, they will understand economic systems, also from an international perspective, and the policies that regulate them. The programme also aims to provide critical awareness of social issues in contemporary reality, which are closely related to economic development, like public policies to counter inequality. The programme also offers an applied approach, with constant use of data analysis, and includes innovative branches of economics such as behavioral economics and experimental methods. The programme's strongly internationally-oriented perspective is finally granted by the use of English as language of instruction.

The first two years of the study programme aim to ensure basic knowledge in different disciplines, with a training in quantitative methods and the development of reasoning and critical thinking skills. Furthermore, students will grasp the basic principles of economics in order to acquire tools for analysing individual choices, market functioning, dynamics underlying economic activities and the labor market. Through targeted teaching, students will develop the ability to collect, process and interpret statistical data, with an early focus on consumer behavior. In the third year of the program, students take advanced courses and apply the tools and skills acquired earlier. They also have the opportunity to further enrich their competencies in analysing the behavioral mechanisms influencing consumer choices. The knowledge and skills acquired are useful both for graduates intending to continue their academic career with a Master Degree and for graduates entering the job market in positions and professional profiles such as operative marketing technician; strategic marketing technician, market analyst, and data technician.

Expected learning outcomes
Knowledge and comprehension skills
The Bachelor's Degree Programme in Economics: Behavior, Data and Policy aims to provide theoretical and applied knowledge and skills in the fields of economics, business, law, computer science and mathematical-statistics. Graduates will be able to understand:
- economic modeling;
- the mechanisms of individual decision-making in economics and related fields;
- the functioning of markets and the policies that regulate them;
- the functioning of economic systems, also from an international perspective;
- the main quantitative and statistical methods used in the analysis of economic data.
In addition, graduates will also acquire strong competences in mathematical and statistical tools, a basic knowledge of business disciplines and the fundamental principles and institutions of the legal system that regulate the mechanisms underlying production, exchange, and consumers’ choices.

Application of knowledge and comprehension skills
Knowledge and comprehension skills are provided mainly through lectures, along with seminars, assignments, individual and group presentations, exercise classes, as well as through individual study. The knowledge and comprehension skills acquired will enable the graduates to deal with economic modelling. They will also acquire the practical skills necessary to gather, process, and analyse data in order to conduct economic analysis. Graduates will thus find their natural working environment in private companies, public administrations and other organizations with an international perspective.

The first two years of the Degree programme ensure basic knowledge in different areas, which contribute to methodological training in the quantitative field (mathematics and statistics). Students will acquire the basic principles of economics and they will acquire essential tools for the analysis of individual choices, the functioning of markets, the dynamics underlying economic variables. Through targeted training activities, students will also acquire the ability to process and interpret statistical data.

In their third year, students will enrich their knowledge through courses focused on the analysis of behavioral mechanisms of consumer choices.

Several courses will also give the opportunity to deepen the acquired knowledge and use it from a practical perspective through individual and group presentations as well as thanks to the participation in laboratories.

Making judgements
At the end of the Degree programme in Economics: Behavior, Data and Policy, graduates will develop critical skills related to the usefulness and limitations of economic modelling. They will also be able to make autonomous judgements about empirical research applied to economic phenomena and about the identification of causal links.

In particular, their independent thinking will embrace: individual decision-making mechanisms in economics; how individual decisions making influence the organization and functioning of markets; the effectiveness and results of economic policies implemented by governments and authorities; the costs and benefits of policies aimed at regulating markets and promoting competition. In addition, the Degree programme aims to provide critical awareness of social issues closely related to economic development such as inequality and sustainability.

Communication skills
Graduates will be able to effectively communicate and disseminate in a clear manner (both in written and oral English) the results of their work, with a solid proficiency in the use of the disciplinary language. In particular, they will be able to present and discuss the output of their research by means of reports and convey information on economic issues, using innovative digital and information technologies. They will also be able to set up cooperative and collaborative relationships within working groups.

Learning skills
Graduates in Economics: Behavior, Data and Policy will learn how to develop and deepen their skills, through: consulting bibliographic materials; consulting databases and other information on the Web. Graduates will also learn to gather and select information from relevant sources and to process and analyse data to shed light on economic phenomena. Graduates will also learn to frame individual economic choices within a rational decision-making perspective.

The Degree Programme will provide useful methodological and empirical skills useful both to proceed with the academic career in international Master's Degree programmes and to shape a professional profile well-equipped to enter the labor market.

Professional profile and employment opportunities
The Degree Programme in Economics: Behavior, Data and Policy aims to train the following professional figures.

1. Profile: Data Technician
Function in a work context: assist specialists in experimental research and in demographic, epidemiological, social and economic surveys; verify and apply research and data acquisition procedures; quality control of collected data and statistical processing and analysis of the data.
Skills associated with the function: solid quantitative and methodological basis for collecting data and conducting statistical analysis.
Employment outlets: enterprises, public and private organizations.

2. Profile: Market Analyst
Function in a work context: to assist specialists in defining marketing strategies; carry out researches on consumer reactions and market conditions; evaluate commercial penetration opportunities for products or services; identify competitive situations, prices and types of consumers; apply established procedures to collect relevant information; organize and analyse collected information, and present it in a relevant and meaningful way to specialists and managers.
Skills associated with the function: solid quantitative basis for conducting statistical analysis, in-depth knowledge of market...
systems and behavioral mechanisms of consumer choices.
Employment outlets: enterprises, public and private organizations.

Pre-requisites for admission
In order to be admitted to the Bachelor's Degree programme in Economics: Behavior, Data and Policy, prospective students must hold an upper secondary school diploma or equivalent qualification obtained abroad after at least 12 years of schooling; they also must have an adequate educational background and possess basic skills in the area of language comprehension, logic and mathematics.

Pursuant to Art. 2 of the Law 264/1999, in order to ensure high quality education (in particular with respect to the capacity constraints necessary to run laboratories, and to hold individual and group presentations in some courses), the maximum number of students who can enroll in the Bachelor's Degree programme in Economics: Behavior, Data and Policy is set at 100, plus 15 places reserved for international non-EU candidates residing abroad.

Assessment of basic knowledge and skills will be ascertained through an online admission test, held in English language - English TOLC-E admission test, the Online Test organized by CISIA (Interuniversity Consortium for Integrated Access Systems), that will focus on the topics listed in the syllabus given at the following link: https://www.cisiaonline.it/area-tematica-english-tolc-economia/structure-and-syllabus/

Selection of students is based on the English TOLC-E admission test too; admission ranking is exclusively based on the score obtained in logic and mathematics sections of the English TOLC-E test. Applicants who want to transfer from other Degree programmes or who already hold a degree and request its recognition (partial or total) must also sit for the test and rank sufficiently high.

The admission test is organized in two sessions: the first session, in spring, is exclusively reserved to students attending their last year of secondary school; the second session, open to all candidates, will take place in summer.

International non-EU candidates residing abroad - both those in their last year of secondary school and those who already got their diploma in previous years - must apply in the first admission session, in spring.

Candidates (both EU and non-EU) who don't reach an overall score of 10 in mathematics and logic sections of the English TOLC-E will be excluded from the admission procedure.

Additional Learning Requirements (OFA)
Admitted candidates who didn't reach an overall score of 15 in mathematics and logic sections of the English TOLC-E will be assigned Additional Learning Requirements (OFA, Obblighi Formativi Aggiuntivi) in the area of logic and mathematics, that must be fulfilled within the first year; students who do not fulfil OFA within this deadline will not be able to take the exams of the second or third year. Further information on these OFA are available online on the Bachelor Degree programme website.

Additional Learning Requirements in English Language proficiency (OFA B2)
To be able to sit the exams included in the degree programme, students must be proficient in English at a B2 level under the Common European Framework of Reference for Languages (CEFR). This proficiency level may be certified as follows:
- by submitting a language certificate attesting B2 or higher level in English and issued no more than three years before the date of submission. You will find the list of language certificates recognized by the University at: (https://www.unimi.it/en/node/39322). The certificate must be uploaded during the enrolment procedure, or subsequently to the portal https://studente.unimi.it/uploadCertificazioniLingue;
- by submitting a secondary school diploma with English as teaching Language. The diploma must be uploaded during the enrolment procedure in the Language Certificate section, or subsequently to the portal https://studente.unimi.it/uploadCertificazioniLingue;
- by taking a placement test offered by the University Language Centre (SLAM) during year I only, in October. Students who fail the test will be required to take a SLAM course. The Placement Test is mandatory for all students who do not hold a valid certificate, or a secondary school diploma with English as teaching language. Students who do not sit the Placement Test by October or who fail to pass the SLAM end-of-course test within six attempts, must obtain a paid certificate to be able to register for and sit any exam included in the degree programme.

Continuing your studies
The Bachelor's Degree Programme in Economics: Behavior, Data and Policy aims to provide its graduates with the appropriate knowledge and competences to continue their studies, in Italy or abroad, with a Master's programme in Economics and related fields, as well as in the realm of Data analysis. Graduates meet the curricular requirement to access several Master's programmes within the Faculty of Social, Political and Economics Sciences of the University of Milan, including those in Data Science For Economics (DSE, LM-Data), Finance and Economics (MEF, LM-16), Economics and Political Science (EPS, LM-56/LM-62), Comunicazione Pubblica e d’Impresa (COM, LM-59).

Programme structure
Teaching modalities and organization
The Bachelor's Degree Programme in Economics: Behavior, Data and Policy is a genuinely multidisciplinary programme, with a focus in the fields of economics and applied statistics, but with courses also in business, law, computer science and philosophy of science.
Students must earn 180 ECTS to complete programme requirements.
Study plan submission
Submission procedures and terms
Students may choose a complete study plan starting from the second year. Each student must submit at least one plan of study before applying for graduation. To graduate, students must have passed all exams included in their latest approved plan of study. If, at the time of applying for graduation, the exams listed in the plan of study do not match those actually passed, the student cannot graduate.
Submission deadlines of plans of study are regulated by the Students’ Secretariats for each academic year, according to the instructions provided on the Unimi related webpage.
Students shall be aware that they will not be able to acquire credits relating to elective courses with the exception of those offered within the degree programme before the approval of their study plan. Furthermore, there are other elective activities introduced by the University project aimed to develop students’ transversal skills. Students need to register these activities in their study plan; transversal skills activities have a limited number of seats and students can apply for one of these seats only if the Course of Study has integrated these activities into the program. For further details, please visit the following webpage: https://www.unimi.it/en/study/bachelor-and-master-study/following-your-programme-study/soft-skills

Didactical calendar

Lectures timetable

Exams

Tutoring
Students can contact the academic guidance tutor for information on admission procedures, structure and requirements of the degree programme and study plan.
Furthermore, students attending Master Degree programmes are selected as tutors to monitor and support other students with learning difficulties. The degree programme also makes use of the tutors available from the Department of Economics, Management and Quantitative Methods to support foreign students and working students on logistical/organizational problems.

Language test / computer literacy test
Additional Language Skills
In the context of this Bachelor’s Programme, students can obtain 3 ECTS by taking an exam in Additional Language Skills. These ECTS shall be obtained in a language other than English and other than each student’s mother tongue. Students who do not hold an Italian high school diploma or bachelor’s degree must demonstrate proficiency in Italian language at the A2 or higher level per the Common European Framework of Reference for Languages (CEFR). This level must be demonstrated prior to completing the course programme in one of the following ways:
- by submitting a certificate of A2 or higher level issued no more than three years prior to the date of submission. You will find the list of language certificates recognized by the University at: https://www.unimi.it/en/node/349/). The language certificate must be submitted to the University Language Centre (SLAM) via the Language Test category of the InformaStudenti service: https://informastudenti.unimi.it/saw/ess?AUTH=SAML;
- via a entry-level test administrated by SLAM that can only be taken only once. Those who fail to reach A2 level will have to attend a 60-hour Italian course geared to their level. Those who do not take the entry-level test or fail to pass the end-of-course test after six attempts will have to obtain language certification privately in order to earn the 3 credits of Additional language skills: Italian.

Computer skills
Students who want to earn 3 credits (CFU) for basic computer skills, as provided by their degree programme, have to attend the “Computer Science Course” through the e-learning platform of the project called “3CFU Informatica” accessible at the following link: https://3cfuinformatica.unimi.it.
It is a blended course with a compulsory final exam. The first exam session is scheduled for January, and more will follow according to a calendar to be made available on the course delivery platform.
Students who have already fulfilled an ICT Assessment during their previous studies should submit the related certification to their degree Secretariat, seeking its acknowledgement: it will be evaluated and they will receive a positive or negative feedback.
The “Computer Science Course 3CFU” course is managed by the CTU - Teaching and Learning Innovation and Multimedia Technology Centre.

Compulsory attendance
Courses attendance is highly recommended.

**Internship criteria**
Students can obtain 3 CFU through an internship or stage with a minimum length of 150 hours (for no more than 8 hours per day and 40 hours per week). The internship or stage must be consistent with the specific purposes and objectives of the Degree programme. Information on how to activate the internship and ask for recognition of credits is detailed at the section “Internships and stage” of the Degree programme website.

**Degree programme final exam**
The final exam consists in writing an essay – independently investigated and developed – on a topic coherent with the contents of the Bachelor’s Degree programme under the supervision of a member of the Collegio Didattico. Alternatively, the final essay can contain the analysis of a specific topic that students have dealt with during their internship. The final paper must be written in English and will be evaluated by a two-member committee. In order to be admitted to the final exam, students must have acquired at least 177 ECTS. The committee awards a score from 0 to 6 points, based on: the nature of the paper (experimental or compilative) and its topic; methodological approach, autonomy in its preparation and writing, expression quality. In accordance with the Faculty Regulation, the score is added to the weighted average resulting from the exams’ marks achieved by the student. Additional 4 points are awarded to students graduating in the summer session of their third year, 2 points to students graduating in the fall session of their third year, 1 point to students graduating in the winter session of their third year.

**EXPERIENCE OF STUDY ABROAD AS PART OF THE DEGREE PROGRAM**
The University of Milan supports international mobility by providing its students with the opportunity to spend study and internship periods abroad. It is a unique chance to enrich your educational path in a new exciting environment.

The agreements entered into by the University with over 300 universities from the 27 EU member countries under the European Erasmus+ programme allow regularly enrolled students to carry out part of their studies at one of the partner universities or to undertake internships at companies, training and research centres and other organizations.

Similar international mobility opportunities are provided outside Europe, through agreements with a number of prestigious institutions.

**Study and internships abroad**
The Department of Economics, Management and Quantitative Methods offers opportunities for study experiences abroad thanks to several agreements with European universities, where students will be able to attend lectures and obtain credits valid for their didactical path. Partners are selected from the most prestigious academic institutions in European area. The Department also stipulated agreements with prestigious University in United Kingdom and Switzerland. The courses offered by partner universities cover all the core topics and disciplines of Economics. The choice of courses is made before departure together with the Erasmus coordinator and the credits earned are officially recognized at the end of the exchange period and included in the study plan.

**How to participate in Erasmus mobility programs**
The students of the University of Milan can participate in mobility programmes, through a public selection procedure. Ad hoc commissions will evaluate:
- Academic career
- the candidate's proposed study programme abroad
- his/her foreign language proficiency
- the reasons behind his/her application

Call for applications and informative meetings
The public selection for Erasmus+ mobility for study generally begins around February each year with the publication of a call for applications specifying destinations and requirements. Regarding the Erasmus+ Mobility for Traineeship, the University of Milan usually publishes two calls a year enabling students to choose a destination defined by an inter-institutional agreement or to find a traineeship position on their own.

The University organizes informative meetings to illustrate mobility opportunities and rules for participation.

**Erasmus+ scholarship**
The European Union grants the winners of the Erasmus+ programme selection a scholarship to contribute to their mobility costs, which may be supplemented by the University funding for disadvantaged students.

**Language courses**
Students who pass the selections for mobility programmes can benefit from intensive foreign language courses offered each year by the University Language Centre (SLAM).
https://www.unimi.it/en/node/8/

Learn more at https://www.unimi.it/en/node/274/
For assistance, please contact:
**ADMISSION CRITERIA: 1ST YEAR CAP ON STUDENT, STUDENT SELECTION BASED ON ENTRANCE TEST**

Application and enrolment information and procedures

The admission test is organized in two sessions: the first session, in spring, is exclusively reserved to students attending their last year of secondary school; the second session, open to all candidates, will take place in summer. International non-EU candidates residing abroad - both those in their last year of secondary school and those who already got their diploma in previous years - must apply in the first admission session, in spring.

More information will be available here: [https://www.unimi.it/en/study/bachelor-and-master-study/degree-programme-enrolment](https://www.unimi.it/en/study/bachelor-and-master-study/degree-programme-enrolment)

**Links to enrolment information and procedures**

[https://www.unimi.it/en/study/bachelor-and-master-study/degree-programme-enrolment](https://www.unimi.it/en/study/bachelor-and-master-study/degree-programme-enrolment)

**N° of places reserved to non-EU students resident abroad**

15

Notes

Applicants who want to transfer from other degree programs or who already hold a degree and request recognition (partial or total) have to sit for the selection test and place themselves in the available places in the ranking list.

For these students, transfer to years subsequent to the first is conditional on the recognition of a minimum number of credits (30 CFU for enrolment in the second year, 60 CFU for enrolment in the third year) acquired in exams coherent with the educational plan of the Bachelor’s Degree programme in Economics: Behavior, Data and Policy. The Board of Education (Collegio didattico) reserves the possibility to recognize different exams, by including them among the elective activities in the study plan.

**Number of places assigned**

100

<table>
<thead>
<tr>
<th>1° COURSE YEAR Core/compulsory courses/activities</th>
<th>Ects</th>
<th>Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Economics and Marketing</td>
<td>9</td>
<td>(6) SECS-P/08, (3) SECS-P/07</td>
</tr>
<tr>
<td>Coding</td>
<td>6</td>
<td>INF/01</td>
</tr>
<tr>
<td>Data Protection and Consumer Law</td>
<td>9</td>
<td>IUS/01</td>
</tr>
<tr>
<td>Mathematics</td>
<td>12</td>
<td>SECS-S/06</td>
</tr>
<tr>
<td>Microeconomics</td>
<td>12</td>
<td>(6) SECS-P/02, (6) SECS-P/01</td>
</tr>
<tr>
<td>Philosophy of Science</td>
<td>6</td>
<td>M-FIL/02</td>
</tr>
<tr>
<td>Probability and Statistics</td>
<td>9</td>
<td>SECS-S/01</td>
</tr>
<tr>
<td><strong>Total number of compulsory credits/ects</strong></td>
<td>63</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2° COURSE YEAR (available as of academic year 2025/26) Core/compulsory courses/activities</th>
<th>Ects</th>
<th>Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Causal Inference and Policy Evaluation</td>
<td>6</td>
<td>(3) SECS-P/05, (3) SECS-P/01</td>
</tr>
<tr>
<td>Competition and Advertising Law</td>
<td>6</td>
<td>IUS/04</td>
</tr>
<tr>
<td>Econometrics</td>
<td>9</td>
<td>SECS-P/05</td>
</tr>
<tr>
<td>Experimental Economics</td>
<td>9</td>
<td>(6) SECS-P/02, (3) SECS-P/01</td>
</tr>
<tr>
<td>Macroeconomics</td>
<td>9</td>
<td>SECS-P/01</td>
</tr>
<tr>
<td>Microeconomics of Uncertainty</td>
<td>9</td>
<td>SECS-P/01</td>
</tr>
<tr>
<td>Public Economics</td>
<td>9</td>
<td>SECS-P/03</td>
</tr>
<tr>
<td><strong>Total number of compulsory credits/ects</strong></td>
<td>57</td>
<td></td>
</tr>
</tbody>
</table>

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<tr>
<th>3° COURSE YEAR (available as of academic year 2026/27) Core/compulsory courses/activities</th>
<th>Ects</th>
<th>Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral Economics</td>
<td>9</td>
<td>(3) SECS-P/02, (6) SECS-P/01</td>
</tr>
<tr>
<td>Consumer Behavior and Marketing Strategy</td>
<td>9</td>
<td>SECS-P/08</td>
</tr>
<tr>
<td>Development and Sustainability</td>
<td>6</td>
<td>SECS-P/01</td>
</tr>
<tr>
<td>Final Exam</td>
<td>3</td>
<td>NA</td>
</tr>
<tr>
<td>Labor Markets and Migration</td>
<td>6</td>
<td>SECS-P/01</td>
</tr>
<tr>
<td>Machine Learning for Economics</td>
<td>9</td>
<td>SECS-S/01</td>
</tr>
<tr>
<td><strong>Total number of compulsory credits/ects</strong></td>
<td>42</td>
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</tbody>
</table>

**Further elective courses**
Students must earn 12 credits for elective activities (also laboratories up to 3 ECTS).
Students must earn 6 credits by selecting among the following alternatives:
- computer skills;
- internship (3 ECTS);
- transversal skills (please check this website page: https://www.unimi.it/en/study/bachelor-and-master-study/following-your-programme-study/soft-skills);
- additional language skills (max 3 ECTS); students with a foreign qualification must necessarily earn 3 credits in Additional Language Skills: Italian (3 ECTS);
- other activities in which also laboratories can be included (max 3 ECTS).

Additional Language Skills: French (3 ECTS) | 3 | ND
Additional Language Skills: German (3 ECTS) | 3 | ND
Additional Language Skills: Italian (3 ECTS) | 3 | ND
Additional Language Skills: Spanish (3 ECTS) | 3 | ND

If there are ECTS still available to allocate, students can earn 3 ECTS with an Internship.

**COURSE PROGRESSION REQUIREMENTS**

The fulfillment of the Additional Learning Obligations (Obblighi formativi aggiuntivi - OFA) of the disciplinary entry requirements is propaedeutic to the second and third year exams.

For the Undergraduate Course in Economics: Behavior, Data and Policy, some courses are preparatory and the related exams must be passed before being able to take the exam in other courses, as detailed below:
- ‘Business Economics and Marketing’ is mandatory before taking the following exam: ‘Consumer Behavior and Marketing Strategy’.

<table>
<thead>
<tr>
<th>Learning activity / course</th>
<th>Prescribed foundation courses</th>
</tr>
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<tbody>
<tr>
<td>Behavioral Economics</td>
<td>Microeconomics</td>
</tr>
<tr>
<td>Consumer Behavior and Marketing Strategy</td>
<td>Business Economics and Marketing</td>
</tr>
<tr>
<td>Development and Sustainability</td>
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<td>Public Economics</td>
<td>Microeconomics</td>
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