

Course Descriptions None 2025-2026

Course Title Sampling Design
 Course Code EBS2037
 ECTS Credits 4,0
 Assessment Whole/Half Grades

Period	Start	End	Mon	Tue	Wed	Thu	Fri
6	22-6-2026	3-7-2026	C				

Level Introductory
 Coordinator Jan van den Brakel For more information: j.vandenbrakel@maastrichtuniversity.nl
 Language of instruction English

Goals
 -Understand why designs like stratified sampling are often more informative than simple random sampling.
 -Learn to recognize the opportunities to apply more advanced sampling designs in practical situations.
 -Learn to implement different sampling designs, and process their outcomes.

Description
 Marketing researchers often draw samples in order to infer the opinions of a client population. This is very practical, but since only a small part of the population is observed, the results are subject to inaccuracy. Of course, we want the sample results to be as close as possible to the true values. The most straightforward way to draw a sample is simple random sampling, where every population member has the same chance of being sampled. However, sometimes more complex sampling designs (e.g. stratified samples) are much better. "Better" in the sense of value-for-money: they allow us to make more accurate statements at the same cost, or to reach a desired level of accuracy at lower cost, than simple random sampling. This course focuses on the statistical aspects of various sampling designs. The objective is to construct appropriate sampling designs in real life situations. During the first half of the course, some theory is introduced, and tested by small numerical assignments. During the second half, a sampling design is developed for a practical situation and the actual sampling is conducted. The samples are drawn from a given data set which serves as population: the course does not involve the construction of a questionnaire and the actual gathering of data.

Literature
 A translated and adapted version of Theorie en Praktijk van het Steekproefonderzoek by J.G. Bethlehem, 1st ed., CBS, Voorburg (to be made available through Canvas).

Prerequisites
 Basic principles from inferential statistics as discussed in typical first-year Quantitative Methods courses such as QM1 (code EBC1005/1006/1007) and QM2 (code EBC1033/1034/1035): basic probability theory, population versus sample, sampling distribution, point estimation, confidence intervals, type I error, regression analysis.An advanced level of English.

Transitional Regulations
 <div class="trreg"><div class="subtitle">TRANSITIONAL REGULATIONS</div><ul class="trcohorts">Bachelor Fiscal EconomicsIn 2024-2025 and 2025-2026 education and exam/resit opportunities are offered.In 2026-2027 exam/resit opportunities are offered.From 2027-2028 onwards, the course is cancelled.<table><col style="width: 200px;"><col style="width: 120px;"><col style="width: 120px;"><thead><tr><th>Academic Year</th><th>Education</th><th>Exam/Resit</th><th>Replacement(s)</th></tr></thead><tbody><tr><td>2024-2025 - 2025-2026</td><td>X</td><td>X</td><td> </td></tr><tr><td>2026-2027</td><td> </td><td>X</td><td> </td></tr><tr><td>2027-2028 onwards</td><td> </td><td> </td><td> </td></tr></tbody></table></div>

Teaching methods PBL / Assignment / Groupwork
 Assessment methods Attendance / Participation
 Evaluation in previous academic year For the complete evaluation of this course please click <http://iwio-sbe.maastrichtuniversity.nl/rapporten.asp?referrer=codeUM>

This course belongs to the following programme / specialisation	Bachelor Economics and Business Economics - Economics	Year 2 Elective Skills
	Bachelor Economics and Business Economics - Economics and Management of Information	Year 2 Elective Skills
	Bachelor Economics and Business Economics - International Business Economics	Year 2 Elective Skills
	Bachelor Fiscal Economics	In transition - Year 2 Elective Skills
	Bachelor International Business	Year 2 Elective Skills
	SBE Exchange Bachelor	Bachelor Exchange Skills
	SBE Exchange Master	Bachelor Exchange Skills
	SBE Non Degree Courses	Bachelor Skills