



## Course catalogue

### TTF-NUT109 Mathematics

Programme	Nutrition
Level	Bachelor's programme
Academic year	1 year /
Semester	Spring Semester
ECTS credits	6 credits
Lecturers	<a href="#">Assoc. Prof. Dr.sc Vesna Knights</a>
Language	Macedonian/English

Objective	The course objectives are for the student to have the necessary knowledge of the required mathematical skills, the ability to think logically and apply the correct applications of mathematical models in to the problems of technical-technology science.
Content	Set of real numbers, intervals; absolute value. Elements of linear algebra, elements of vector algebra. Determinate and matrix. Limits and Continuity. Differentiation Rules. Linearization and Differentials. Applications of Derivatives, Extreme Values of Functions. Techniques of Integration, Undefined integrals. Newton-Leibniz formula, Substitution and integration by parts in the definite integral, Application of the definite integral. Differential equations, Ordinary differential equations of the first order.
Learning materials	Reading from the primary literature are referenced in class and posted to the course website. 4. Bill Cox, Understanding Engineering Mathematics, 2001, ISBN: 0-7506-5098-2 5. Thomas, G. B.: Thomas' Calculus, (Pearson Addison-Wesley). ISBN-10: 0-321-87896-5 ISBN-13: 978-0-321-87896-0 6. Bretscher, O.: Linear Algebra with Applications (Pearson Prentice Hall).