

Course Syllabi

1. EDCA-00231 FINANCIAL MATHEMATICS

2. 96 credits hours.

3. Bibliography

- <https://pdfcoffee.com/ingenieria-economica-7ma-edicion-leland-blank-amp-anthony-tarquin-4-pdf-free.html>, Lelan, T Blank and Anthony Tarquin, 2005
- https://repository.usta.edu.co/bitstream/handle/11634/9943/valor_del_dinero_5dic.pdf, Fernandez José Antonio, 2017

4. Specific Course Information

- a. Financial mathematics has an application in economic, industrial and business life in general, which promotes a proactive and critical attitude to the challenges that the professional faces in obtaining and managing the financial activities that the organization requires.
- b. Prerequisites:
 - CSCO-00119 GENERAL ECONOMICS

5. Learning Objectives of the Course

- a. Strengthen the application of skills in the management of tools for solving the financial problems of business and everyday life in order to promote a proactive and critical attitude to the challenges faced by the Industrial Engineer in the sustainable business development that society demands.
 - Strengthen students' capacities for application in economic and financial assessments, allowing the Industrial Engineer to make wise decisions quickly and opportunity
- b. Learning Outcomes
 - Rda2. apply financial mathematics for recommendations in the best procedure in optimising economic resources within an organization.
 - Rda3. apply financial mathematics for the analysis of financial risks of projects to be applied in the organization.

6. Course Topics

- Unit 1: money value at time
- Unity 2: factors: how time and interest effects money
- Unit 3: project financing, amortization, depreciation, economic analysis after taxes
- Unit 4: factors: assessment of investment projects