Regulations for Minor in Economics

Minor Program: A BTech student can earn a minor certification in economics by completing 16 credits of regular courses, and a further 4 credits through additional coursework, independent study (IS), undergraduate research (UR), or independent project (IP), for a cumulative 20 credits in economics. The program is intended to be complementary to CSE/ECE, and emphasizes microeconomics, game theory, and data analysis. Students interested in topics not covered, e.g., environmental or health economics may do so through Independent Study or credit transfer.

Faculty: Asst. Prof. Saptarshi Mukherjee (PhD, Economics, Indian Statistical Institute, New Delhi) and Asst. Prof. Shreemoy Mishra (PhD, Economics, University of Texas at Austin).

Courses: All courses are for 4 credits and require 3rd year standing or higher.

1. Introduction to Economic Analysis (IEA): Foundation course consisting of two parts microeconomic theory and one part macroeconomics (open to 2nd year).
2. Applied Econometric Analysis (AEA): Foundation course in multiple regression analysis, the pervasive empirical tool in applied economics.
3. Game Theory (GT): Foundation course in game theory, the pervasive tool for strategic analysis in economics. (Pending formal approval).
4. Economics of Information and IT (EIIT): This is a course in applications of cooperative and non-cooperative game theory in the context of markets with imperfect competition.
5. Network Economics (NWE): A comprehensive introduction to social and economic networks, drawing on the latest findings in economics, sociology, computer science, physics, and mathematics. (Pending formal approval).

Core Courses: Introduction to Economic Analysis is mandatory for the minor. Students must also take at least one of Applied Econometric Analysis or Game Theory.

Advanced Courses (ADV): These will vary from year to year. Potential topics include: Mechanism Design and Auction Theory, Social Choice Theory, Behavioral Economics, Microeconomics of Banking, and Advanced Econometrics.

Management Science: A maximum of two management science courses (FIN/MAN) can be counted towards the economics minor. Planned offerings (by guest faculty) are: Corporate Finance, Financial Markets and Investment, and Supply Chain Management.
Benchmarking: Economics-minor programs at North American and Indian universities typically require six courses in economics, including *Probability and Statistics*, which all BTech students take in 1st year. Thus, the proposed 20-credit program is quite standard.

Sequencing: Recommended sequence (in bold).

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<th>Year</th>
<th>Fall / Monsoon</th>
<th>Spring / Winter</th>
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<tbody>
<tr>
<td>2</td>
<td>IEA</td>
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<tr>
<td>3</td>
<td>GT, IEA, EIIT, FIN/MAN</td>
<td>(AEA or NWE) &amp; FIN/MAN, ADV</td>
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<tr>
<td>4</td>
<td>EIIT or IP/UR/IS, IEA, GT, FIN/MAN</td>
<td>(ADV or NWE), AEA, FIN/MAN, IP/UR/IS</td>
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Change History:

July, 2014 release