

**Indian Institute of Technology Guwahati**  
**Proposal for a New Course/ Revision of a Course**

Course Number & Title: BM711 & Econometric Methods		
L-T-P-C: 3-0-0-6		
Type of Letter Grading (Regular Letter Grades / PP or NP Letter Grades): Regular Letter Grades		
Kind of Proposal (New Course / Revision of Existing Course): New Course		
Offered as (Compulsory / Elective): Elective		
Offered to: Doctor of Philosophy (PhD)		
Offered in (Odd/ Even / Any): Any		
Offered by (Name of Department/ Center): School of Business		
Pre-Requisite: NIL		
Preamble / Objectives (Optional): <p>Course Content/ Syllabus (as a single paragraph if it is not containing more than one subject. Sub-topics/ Sections may be separated by commas(,). Topics may be separated by Semi-Colons(;). Chapters may be separated by Full-Stop(.). While starting with broad heading, it may be indicated with Colon symbol before the topics. For example: <i>Multi-variable Calculus: Limits of functions, Continuity, .....</i> )</p> <p>Introduction to Econometrics; Basics of regression analysis, concepts and assumptions; Multiple Regression Analysis; Multicollinearity and Inference; Heteroscedasticity; Autocorrelation; Mis-specification Errors; Qualitative variables, dummy variable regression; Introduction to time series analysis; Instrumental variable and 2 Stage Least Squares (SLS); Binary/Multinomial response models, Introduction to logit, probit, tobit, multinomial logit/probit, Heckman selection models; Panel data analysis, fixed effects, random effects, panel VAR, panel cointegration.</p>		
Books (In case UG compulsory courses, please give it as "Text books" and "Reference books". Otherwise give it as "References"). <p>Texts: (Format: Authors, <i>Book Title</i> in <i>Italics</i> font, Volume/Series, Edition Number, Publisher, Year.)</p> <table border="1"> <tr> <td>1. Wooldridge, J., <i>Introductory Econometrics: A Modern Approach</i>, 5<sup>th</sup> edition, Cengage Learning, 2013.</td> </tr> <tr> <td>2. Gujarati, D. N., &amp; Porter, D. C., <i>Basic Econometrics</i>, 5<sup>th</sup> edition, McGraw Hill, 2009.</td> </tr> </table>	1. Wooldridge, J., <i>Introductory Econometrics: A Modern Approach</i> , 5 <sup>th</sup> edition, Cengage Learning, 2013.	2. Gujarati, D. N., & Porter, D. C., <i>Basic Econometrics</i> , 5 <sup>th</sup> edition, McGraw Hill, 2009.
1. Wooldridge, J., <i>Introductory Econometrics: A Modern Approach</i> , 5 <sup>th</sup> edition, Cengage Learning, 2013.		
2. Gujarati, D. N., & Porter, D. C., <i>Basic Econometrics</i> , 5 <sup>th</sup> edition, McGraw Hill, 2009.		