

INDIAN INSTITUTE OF TECHNOLOGY KANPUR

Photonics Science and Engineering Programme

Course Title	:	Research in Photonics and Lasers
Course No.	:	PSE 606A, semester 2017-18-II
Instructor	:	Dr. R.Vijaya
Contact details	:	office: SL 217, e-mail rvijaya@iitk.ac.in
Prerequisite	:	---
Level	:	PG level (compulsory for M.Tech students of PSE)
Credits	:	L-T-P-D-[C] 0-0-0-9-[9]

Course Description:

This course will serve as a precursor to the full Master's thesis that a student in the PSE program will undertake in the second year. The purpose of the course is two-fold. It will help the student to do independent reading on a topic with research potential. The second goal is to train the student in various aspects of research methodology. These are literature survey, problem statement, preliminary analysis, deciding the research flowchart, conducting experiments / simulation, data analysis / interpretation, and report preparation. The student will identify and complete a short project during the semester with the help of the assigned M.Tech thesis advisor. The grade in the course will be based on a mid-term presentation and a final presentation combined with a report. A department-level committee will evaluate all research projects and the committee chair (course instructor) will award the final grade.

This will be a S/X grade course.

Research area that will be pursued will be decided by the student and approved by the DPGC in the previous semester.

Texts and references will be project-specific. A few lectures will be given to assist students in data representation, thesis and manuscript preparation, and will be conducted in the second half of the semester. The following reference will be appropriate in this context:

T.N. Huckin and L.A. Olsen, Technical Writing and Professional Communication for non-native speakers of English (McGraw Hill, second international edition (1991)).
