

Module PMRF-ISSS119/II/2024

Commutative Algebra

Name of the PMRF student

Pratik Ashok Jadhav

Required background of the students taught

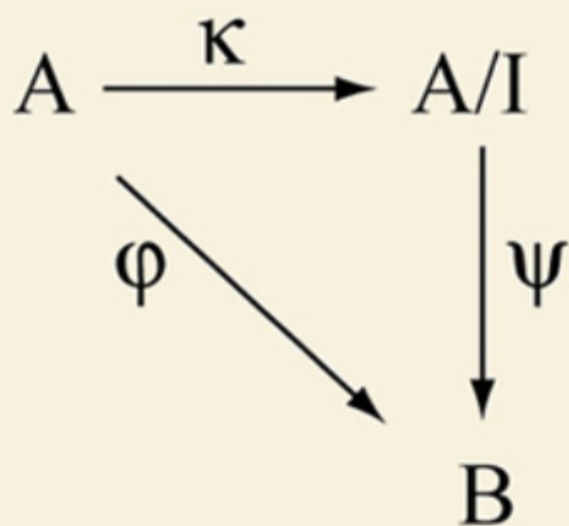
* For Mathematics students

* Prerequisite for this course: Abstract Algebra (which includes Ring theory, Field theory); and point-set topology

Details of the content of the module

This course will cover the following topics:

- * Noetherian rings and Modules, Localisations
- * Hilbert basis theorem, Cayley-Hamilton theorem
- * Exact Sequences, Hom, Tensor Products
- * Hilbert's Null-stellensatz
- * Integral dependence, Going-up and Going down theorems
- * Noether's normalization lemma
- * Discrete valuation rings and Dedekind domains.



Schedule of the module

Start date : 4th August 2024

End date : 27th April 2025

Time : Every Sunday from 3PM to 4:30PM

Meeting link : Link : <https://meet.google.com/pna-pmin-bay>

Contact email ID: pratikjadhav@iisc.ac.in

Registration link: <https://forms.gle/S5FuGAKhCRI3VBvS9>