**Post Graduate Teaching:** Courses offered by department in Post Graduate Programme (As per 4<sup>th</sup> Dean's Committee)

Code	Course Title	Credits	Semester
MICRO 501* @	Principles of microbiology 3+1 C		Odd
MICRO 503*	Microbial genetics	2+1	
MICRO 511	Biofertilizer technology	1+1	
MICRO 508	Environmental microbiology	2+1	-
MICRO 509**	Plant-microbe interactions	3+0	
MICRO 510	Industrial microbiology	2+1	
MICRO 512	Cyanobacterial and algal biotechnology	2+0	
MBB 603	Advances in microbial biotechnology	3+0	
MICRO 591	Master's seminar	1+0	
MICRO 599	Master's research	20	
MICRO 691	Doctoral seminar -I	1+0	
MICRO 692	Doctoral seminar –II	1+0	
MICRO 699	Doctoral research	45	
MICRO 502*	Microbial physiology and metabolism	3+1	Even
MICRO 505*	Microbial biotechnology	2+1	
MICRO 506*	Food and dairy microbiology	2+1	
MICRO 504*\$	Soil microbiology	2+1	
MICRO 507	Bacteriophages	1+1	
MICRO 601**	Advances in fermentation	2+1	
MICRO 602**	Advanced microbial physiology	2+0	
MICRO 603**	Regulation of microbial biosynthesis	2+0	
MICRO 604**	Current topics in soil microbiology	2+0	
MICRO 591	Master's seminar	1+0	
MICRO 599	Master's research	20	
MICRO 691	Doctoral seminar –I	1+0	
MICRO 692	Doctoral seminar -II	1+0	
MICRO 699	Doctoral research	45	
	MICRO 501* @ MICRO 503* MICRO 503* MICRO 508 MICRO 509** MICRO 509** MICRO 5012 MICRO 5012 MICRO 509 MICRO 601 MICRO 602* MICRO 505* MICRO 505* MICRO 504* MICRO 504* MICRO 504* MICRO 504* MICRO 601** MICRO 601** MICRO 601** MICRO 601** MICRO 603** MICRO 603** MICRO 603**	MICRO 501* @Principles of microbiologyMICRO 503*Microbial geneticsMICRO 511Biofertilizer technologyMICRO 508Environmental microbiologyMICRO 509**Plant-microbe interactionsMICRO 510Industrial microbiologyMICRO 511Soupobacterial and algal biotechnologyMICRO 512Cyanobacterial and algal biotechnologyMIBB 603Advances in microbial biotechnologyMICRO 591Master's seminarMICRO 591Master's researchMICRO 691Doctoral seminar -IIMICRO 692Doctoral researchMICRO 505*Microbial biotechnologyMICRO 505*Microbial biotechnologyMICRO 504*Soil microbiologyMICRO 504*Soil microbiologyMICRO 601**Advances in fermentationMICRO 601**Advances in fermentationMICRO 603**Regulation of microbial biosynthesisMICRO 604**Current topics in soil microbiologyMICRO 599Master's researchMICRO 591Master's researchMICRO 603**Current topics in soil microbiologyMICRO 603**Souparties in soil microbiologyMICRO 591Master's researchMICRO 591Master's researchMICRO 591Master's researchMICRO 604**Current topics in soil microbiologyMICRO 591Master's researchMICRO 592Doctoral seminar -IIMICRO 593Master's researchMICRO 594Master's researchMICRO 595Master's research <td>MICRO 501* @Principles of microbiology3+1MICRO 503*Microbial genetics2+1MICRO 511Biofertilizer technology1+1MICRO 508Environmental microbiology2+1MICRO 509**Plant-microbe interactions3+0MICRO 510Industrial microbiology2+1MICRO 511Gyanobacterial and algal biotechnology2+0MBB 603Advances in microbial biotechnology3+0MICRO 591Master's seminar1+0MICRO 593Master's research20MICRO 691Doctoral seminar -I1+0MICRO 692Doctoral research45MICRO 505*Microbial biotechnology2+1MICRO 505*Microbial biotechnology2+1MICRO 505*Microbial physiology and metabolism3+1MICRO 506*Food and dairy microbiology2+1MICRO 507Bacteriophages1+1MICRO 601**Advances in fermentation2+1MICRO 602**Advanced microbial physiology2+0MICRO 603**Regulation of microbial biosynthesis2+0MICRO 691Doctoral seminar -I1+0MICRO 691*Master's research20MICRO 692**Advanced microbial physiology2+1MICRO 603**Regulation of microbial biosynthesis2+0MICRO 691Doctoral seminar -I1+0MICRO 691Master's research20MICRO 692Doctoral seminar -I1+0MICRO 693Master's research20MIC</td>	MICRO 501* @Principles of microbiology3+1MICRO 503*Microbial genetics2+1MICRO 511Biofertilizer technology1+1MICRO 508Environmental microbiology2+1MICRO 509**Plant-microbe interactions3+0MICRO 510Industrial microbiology2+1MICRO 511Gyanobacterial and algal biotechnology2+0MBB 603Advances in microbial biotechnology3+0MICRO 591Master's seminar1+0MICRO 593Master's research20MICRO 691Doctoral seminar -I1+0MICRO 692Doctoral research45MICRO 505*Microbial biotechnology2+1MICRO 505*Microbial biotechnology2+1MICRO 505*Microbial physiology and metabolism3+1MICRO 506*Food and dairy microbiology2+1MICRO 507Bacteriophages1+1MICRO 601**Advances in fermentation2+1MICRO 602**Advanced microbial physiology2+0MICRO 603**Regulation of microbial biosynthesis2+0MICRO 691Doctoral seminar -I1+0MICRO 691*Master's research20MICRO 692**Advanced microbial physiology2+1MICRO 603**Regulation of microbial biosynthesis2+0MICRO 691Doctoral seminar -I1+0MICRO 691Master's research20MICRO 692Doctoral seminar -I1+0MICRO 693Master's research20MIC

\* Core courses for master's program; \*\* Core courses for doctorate program
@ Cross listed with Biotechnology MBB 554; # Cross listed with Biotechnology MBB 506; \$ Cross listed with Soils 506.

Sr No	Name of Class rooms	Sitting Capacity	Functional utility / nature of use	Existing Facilities		
A. Classrooms						
1	PG classroom	30	Used in PG teaching	Chairs with side handle, white board, projector, computer and podium		
2	Conference hall	90	Used for PG teaching, seminar, training, conference	Chairs, podium, mike and sound system with projector and motorized screen		
3	Departmental Library	05	Students can refer books of Microbiology subject	Chair, Table, Library cupboards having more than hundred books and 51 thesis of PG students for reference		
B. Laboratories						
4	PG Laboratory	60.8 m <sup>2</sup> (15 students at a time)	Conducting practical classes of postgraduate and polytechnic students	Autoclave, Laminar air flow, Plant growth chamber, incubator, water bath,, microscope, tissue culture rack, working table, storage for chemicals, glass wares		
5	Molecular laboratory	16.0 m <sup>2</sup>	For molecular analysis of microbial and soil samples	Gradient PCR, Real Time PCR, transilluminator, Bio-spectrophotometer, cooling microcentrifuge, Gel dryer, Denaturing Gradient Gel Electrophoresis, Gel documentation system		
6	Instrumentation Lab-2	18.9 m <sup>2</sup>	For placing instruments useful for PG research	Basket centrifuge, UV- lyophilizer, Visible spectrophotometer, microwave oven		
7	Chromatography laboratory	16.0 m <sup>2</sup>	For analysis of the post graduate research samples through chromatographic	GC system, HPLC, CO <sub>2</sub> incubator, sonic bath		
C. Processing / Storage facility						
1	Backyard shade		For conducting pot experiments			
2	Cold room on first floor	12.0 m <sup>2</sup>	For storage and preservation of microbial cultures and bulk fermented broth			

## Facilities Available for Post Graduate Teaching and Research

**Note:** Department has two floored building for UG & PG teaching as well as research facility total 973.2 m<sup>2</sup>.



Microbial Biotechnology Laboratory



GC & HPLC Laboratory

PG Working Laboratory



Walk In Cold Room



**Cenrtal Instrument Laboratory**