

Post Graduate Diploma in Bioinformatics (PGDIB)

Ordinance & Regulations for **Post Graduate Diploma (vocational) Course in Bio-informatics** has been approved by Honøble Chancellor, Universities of Bihar vide **Letter No.: TMBU-(Regulations) –29/2008–1329/GS(I) Dated 10-09-2015** of Governorø Secretariat, Raj Bhawan, Patna (Bihar).

The Post Graduate Diploma (vocational) Course in Bio-informatics is started in the University Centre of Bioinformatics, T.M. Bhagalpur University, with an objective to prepare student for productive with the requisite knowledge that will enable them to pursue a career in Bio-informatics either in academics or in industry. To impart in-depth training in theoretical and practical aspects of applications of Information Technology to solve problems in Biology. To enable the students to acquire an integrated outlook of the subject so that they could become potential researchers in the fields of Biotechnology and Bio-informatics:

1. Providing students with the requisite knowledge that will enable them to pursue a career in Bio-informatics, both in academics and/or in industry.
2. Give students an in-depth training in both the theoretical and practical aspects of the topics that Bio-informatics encompasses, including those related to Biology as well as IT subjects.
3. Enable students to acquire an integrated outlook of the subject and to cater the needs of researchers in the Biotechnology and Bio-informatics sectors.

Admission:

- ❖ Candidates seeking admission to Post-Graduate Diploma (Vocational) Course in Bio-informatics must have acquired the graduation degree in Science, Medicine, Engineering, Agriculture and Pharmacy, Biotechnology or Biochemistry from a University as is established by law or an equivalent degree thereto as is recognized by T.M. Bhagalpur University, with at least 45% marks at the graduation level.

- ❖ Admission to Post-Graduate Diploma (Vocational) Course in Bio-informatics shall be done on the basis of the marks obtained by the candidates in the Aptitude Test to be conducted in this behalf by the University at the beginning of each academic session. The test paper shall consist of 100 objective type questions of multiple choices each question carrying one mark to be set from areas of basic sciences, computer knowledge, environment and general studies.
- ❖ The date and time of the Test shall be announced each year by the University through newspapers or university websites.
- ❖ Candidates appearing for the test shall have to pay Rs.500/- each as cost of the admission form and other expenses to be incurred by the University in connection with the conduct of the aforesaid Aptitude Test.

Number of Seats: 30 (Thirty).

Duration:

Duration of the course shall be of a year and half, spread over three semesters. The first semester shall start in July of the first year of study.

Reservation:

Reservation of seats for SC/ST/OBC etc. shall be done as per reservation rules of the State Government of Bihar.

Syllabus and Course Structure:

Paper Code	Paper Title	Internal Assessment	Semester Examination	Total
Semester - I				
BIN101	Bioinformatics - I	20	80	100
BIN102/ BIN107	Elective óI*	20	80	100
BIN103/ BIN108	Elective óII*	20	80	100
BIN104	Funding of Computing	20	80	100
BIN105	Computer Programming in C (Theory)	20	80	100
BIN106	Computing Lab-I (Practical): C and Software packages.	20	80	100
Semester –II				
BIN201	Bioinformatics-II	20	80	100
BIN202	Computational Methods for Sequence Analysis	20	80	100

BIN203	Molecular Imaging and Drug Design	20	80	100
BIN204	Database Management System	20	80	100
BIN205	PERL Programming and Applications to Bioinformatics	20	80	100
BIN206	Computing Lab ó II (Practical): Sequence alignment and database search techniques.	20	80	100
Semester – III				
BIN301	Project	20	80	100
	Grand Total	260	1040	1300

❖ Note:- Keeping in view the background of candidate, the Department shall do the allocation of elective course to students from Physical Sciences and Biological Sciences as follows:

Elective	Students from Physical Sciences to offer	Students from Biological Sciences to offer
Elective-I	BIN102 Modern Biology	BIN107 Basic Mathematics
Elective-II	BIN103 Structural Biology	BIN108 Statistics

Fee Structure:

Fee structure for the course shall be as follows:-

(a) Admission Fee	Rs. 100/- (One time)
(b) Registration Fee	Rs. 200/- (One time)
(c) Tuition Fee	Rs.5000/- (Each Semester)
(d) Laboratory & Software	Rs.2000/- (Each Semester)
(e) Library	Rs.1000/- (Each Semester)
(f) Air-conditioning, electricity & Water	Rs.1000/- (Each Semester)
(g) Examination fee	Rs.1000/- (Each Semester)