

भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान भोपाल

Circular

IISERB/DOAA/2020/132 March 18, 2020

Sub: Mandatory requirements for obtaining a minor from Y18 batch of BS/BS-MS (Dual Degree) Students onwards.

Ref: Senate 57 (Agenda Item No. 57.15) dated February 20, 2020.

The following are the mandatory requirements for obtaining a minor, in addition to obtaining a major.

In order to obtain a minor in any discipline, a student has to obtain a minimum of 18 credits from that discipline. The minor will be mentioned in the final Degree Certificates (in addition to the transcripts). The departments' specific additional requirements are listed below:

Department of Biological Sciences:

The student must take the following courses listed below:

1. BIO 303: Biochemistry I (4)

Pre-req.: BIO 201: Biology III: Fundamentals of Molecular Biology (3)

2. BIO 306: Immunology I (4)

3. BIO 406: Evolutionary Ecology (4)

Pre-req.: BIO 202: Biology IV: Basic Genetics (3)

The remaining credit requirements may be completed by completing any 300 or higher level courses from Department of Biological Sciences.

Department of Chemical Engineering:

The student must take the following courses listed below:

- 1. CHE 304: Mass Transfer and Separation Process (4)
- 2. CHE 305: Heat Transfer Operations (4)
- 3. CHE 306: Chemical Reaction Engineering I (4)

The remaining credit requirements may be completed by completing any 300 or higher level courses from Department of Chemical Engineering.

Department of Chemistry:

Students must complete any three professional courses of 3rd and 4th years from Department of Chemistry.

The remaining credit requirements may be completed by completing any 300 or higher level courses from Department of Chemistry.

Pre-requisites for the courses shall also be applied by the department to the student minoring in Chemistry.

Data Science and Engineering:

Credit requirements may be satisfied by completing any 300 or higher level courses of Data Science and Engineering.

Department of Earth and Environmental Sciences:

The student must take the following courses listed below:

- 1. EES 331: Geohydrology (4)
- 2. EES 337: Solid Earth Geophysics (4) **Pre-req.** EES 202: The Evolution of the Earth
- 3. EES 348: Science of Sustainability (4) **Pre-req.** EES 201: Atmospheric Sciences and EES 205: Oceanography

The remaining credit requirements may be completed by completing any 300 or higher level courses from Department of Earth and Environmental Sciences.

Department of Electrical Engineering and Computer Science:

Credit requirements may be completed by completing any 300 or higher level courses from Department of Electrical Engineering and Computer Science.

Department of Economic Sciences:

The student must take the following courses listed below:

- 1. ECO 351: Econometrics I (4)
- 2. ECO 352: Microeconomics I (4)
- 3. ECO 354: Macroeconomics I (4)

The remaining credit requirements may be completed by completing any 300 or higher level courses from Department of Economic Sciences. However, ECO 500/600: Law Relating to Intellectual Property and Patents will not be counted towards minor degree.

Department of Humanities and Social Sciences:

Credit requirements may be satisfied by completing any 300 or higher level courses from Department of Humanities of Social Sciences.

Department of Mathematics:

The student must take the following courses listed below:

- 1. MTH301: Group Theory (4)
- 2. MTH303: Real Analysis I (4)
- 3. MTH306: Ordinary Differential Equations (4)
- 4. Any 400 level Course from the Department of Mathematics.

The remaining credit requirements may be completed by completing any 300 or higher level courses from Department of Mathematics.

Department of Physics:

The student must take the following courses listed below:

- 1. PHY303: Quantum Mechanics (4)
- 2. PHY305: Classical Mechanics (4)
- 3. PHY306: Statistical Mechanics (4)

The remaining credit requirements may be completed by completing any 300 or higher level courses from Department of Physics.

Dean, Academic Affairs

To,

- 1. All Students via E-mail.
- 2. All Faculty Members via E-mail.
- 3. Notice/Website.