

**Course Curricula for Four Year Degree Course in Food Technology and Biochemical Engineering :  
First Year –First Semester :**

| No.   | Subject Code    | Name of the Subject              | Pds/ Week |   |     | Total Pds | Marks |           | Total marks | Credit |   | Total Credit |
|-------|-----------------|----------------------------------|-----------|---|-----|-----------|-------|-----------|-------------|--------|---|--------------|
|       |                 |                                  | L         | T | P/S |           | Exam  | Sessional |             | T      | S |              |
| 1     | FTBE/Phy/T/111  | Physics I                        | 4         | 0 | 0   | 30        | 100   |           | 800         | 3      |   | 27           |
| 2     | FTBE/Chem/T/112 | Inorganic & Analytical Chemistry | 4         | 0 | 0   |           | 100   |           |             | 4      |   |              |
| 3     | FTBE/Chem/T/113 | Physical Chemistry               | 4         | 0 | 0   |           | 100   |           |             | 4      |   |              |
| 4     | FTBE/Math/T/114 | Mathematics I                    | 4         | 0 | 0   |           | 100   |           |             | 4      |   |              |
| 5     | FTBE/Hu/T/115   | Humanities                       | 4         | 0 | 0   |           | 100   |           |             | 3      |   |              |
| 6     | FTBE/Phy/S/111  | Physics Laboratory               | 0         | 0 | 4   |           |       | 100       |             |        | 3 |              |
| 7     | FTBE/ME/S/112   | Workshop Practice I              | 0         | 0 | 3   |           |       | 100       |             |        | 3 |              |
| 8     | FTBE/ME/S/113   | Engineering Drawing I            | 0         | 0 | 3   |           |       | 100       |             |        | 3 |              |
| Total | 8 Sub(5T+3S)    | 8 Non-Dept.                      | 20        | 0 | 10  |           | 500   | 300       |             | 18     | 9 |              |

**Course Curricula for Four Year Degree Course in Food Technology and Biochemical Engineering :  
First Year –Second Semester :**

| No.   | Subject Code    | Name of the Subject                    | Pds/ Week |   |     | Total Pds | Marks |           | Total marks | Credit |   | Total Credit |
|-------|-----------------|--|-----------|---|-----|-----------|-------|-----------|-------------|--------|---|--------------|
|       |                 |  | L         | T | P/S |           | Exam  | Sessional |             | T      | S |              |
| 1     | FTBE/T/121      | Microbiology I                         | 3         | 0 | 0   | 30        | 100   |           | 900         | 3      |   | 27           |
| 2     | FTBE/T/122      | Biochemistry & Nutrition I             | 3         | 0 | 0   |           | 100   |           |             | 3      |   |              |
| 3     | FTBE/T/123      | Chemical Engg. Fundamentals            | 3         | 0 | 0   |           | 100   |           |             | 3      |   |              |
| 4     | FTBE/Phy/T/124  | Physics II                             | 4         | 0 | 0   |           | 100   |           |             | 3      |   |              |
| 5     | FTBE/Chem/T/125 | Organic Chemistry                      | 4         | 0 | 0   |           | 100   |           |             | 3      |   |              |
| 6     | FTBE/EE/T/126   | Fundamentals of Electrical Engineering | 3         | 0 | 0   |           | 100   |           |             | 3      |   |              |
| 7     | FTBE/ME/S/121   | Engineering Drawing II                 | 0         | 0 | 3   |           |       | 100       |             |        | 3 |              |
| 8     | FTBE/ME/S/122   | Workshop Practice II                   | 0         | 0 | 3   |           |       | 100       |             |        | 3 |              |
| 9     | FTBE/Chem/S/123 | Organic Chemistry Laboratory           | 0         | 0 | 4   |           |       | 100       |             |        | 3 |              |
| Total | 9 Sub(6T+3S)    | 3 Dept.+<br>6 Non-Dept.                | 20        | 0 | 10  |           | 600   | 300       |             | 18     | 9 |              |

**Course Curricula for Four Year Degree Course in Food Technology and Biochemical Engineering :  
Second Year –First Semester :**

| No.   | Subject Code    | Name of the Subject             | Pds/ Week |   |   | Total Pds | Marks |           | Total marks | Credit |   | Total Credit |
|-------|-----------------|---------------------------------|-----------|---|---|-----------|-------|-----------|-------------|--------|---|--------------|
|       |                 |                                 | L         | T | P |           | Exam  | Sessional |             | T      | S |              |
| 1     | FTBE/T/211      | Fluid Flow                      | 3         | 0 | 0 | 28        | 100   |           | 900         | 3      |   | 24           |
| 2     | FTBE/T/212      | Biochemistry & Nutrition II     | 3         | 0 | 0 |           | 100   |           |             | 3      |   |              |
| 3     | FTBE/T/213      | Principles of food Preservation | 3         | 0 | 0 |           | 100   |           |             | 3      |   |              |
| 4     | FTBE/ME/T/214   | Basics of Mechanisms            | 4         | 0 | 0 |           | 100   |           |             | 3      |   |              |
| 5     | FTBE/ME/T/215   | Mechanics of Solid              | 4         | 0 | 0 |           | 100   |           |             | 3      |   |              |
| 6     | FTBE/Math/T/216 | Mathematics II                  | 3         | 0 | 0 |           | 100   |           |             | 3      |   |              |
| 7     | FTBE/S/211      | Microbiology Laboratory         | 0         | 0 | 4 |           |       | 100       |             |        | 3 |              |
| 8     | FTBE/Chem/S/212 | Inorganic Chemistry Laboratory  | 0         | 0 | 4 |           |       | 100       |             |        | 3 |              |
| Total | 8 Sub(6T+2S)    | 4 Dept.+<br>4 Non-Dept.         | 20        | 0 | 8 |           | 600   | 200       |             | 18     | 6 |              |

**NOTE:Considering the case of two parallel courses ( i.e. 3-yr B.Tech & 4-Yr B.E ), the Department had to set the curricula cross-matched for each semester of bothe the courses and for that reason we had to offer only two sessional classes in the 2nd year-1st semester for four year course**

**Course Curricula for Four Year Degree Course in Food Technology and Biochemical Engineering :  
Second Year –Second Semester :**

| No.   | Subject Code    | Name of the Subject                  | Pds/ Week |   |    | Total Pds | Marks |           | Total marks | Credit |   | Total Credit |
|-------|-----------------|--------------------------------------|-----------|---|----|-----------|-------|-----------|-------------|--------|---|--------------|
|       |                 |                                      | L         | T | P  |           | Exam  | Sessional |             | T      | S |              |
| 1     | FTBE/T/221      | Chemistry of Food                    | 4         | 0 | 0  | 32        | 100   |           | 900         | 3      |   | 27           |
| 2     | FTBE/T/222      | Heat Transfer                        | 3         | 0 | 0  |           | 100   |           |             | 3      |   |              |
| 3     | FTBE/T/223      | Microbiology II                      | 3         | 0 | 0  |           | 100   |           |             | 3      |   |              |
| 4     | FTBE/Math/T/224 | Mathematics III                      | 4         | 0 | 0  |           | 100   |           |             | 3      |   |              |
| 5     | FTBE/ET/T/225   | Elementary Electronics               | 3         | 0 | 0  |           | 100   |           |             | 3      |   |              |
| 6     | FTBE/CSE/T/226  | Numerical Methods & Computer Prog.   | 3         | 0 | 0  |           | 100   |           |             | 3      |   |              |
| 7     | FTBE/S/221      | Chemistry of Food Laboratory         | 0         | 0 | 4  |           |       | 100       |             |        | 3 |              |
| 8     | FTBE/ME/S/222   | Machine Design & Drawing             | 0         | 0 | 4  |           |       | 100       |             |        | 3 |              |
| 9     | FTBE/CSE/S/223  | Computer Appli. & Prog. Practice Lab | 0         | 0 | 4  |           |       | 100       |             |        | 3 |              |
| Total | 9 Sub(6T+3S)    | 4 Dept.+<br>5 Non-Dept.              | 20        | 0 | 12 |           | 600   | 300       |             | 18     | 9 |              |

**Course Curricula for Four Year Degree Course in Food Technology and Biochemical Engineering :  
Third Year-First Semester :**

| No.   | Subject Code    | Name of the Subject               | Pds/ Week |   |    | Total Pds | Marks |           | Total marks | Credit |   | Total Credit |
|-------|-----------------|-----------------------------------|-----------|---|----|-----------|-------|-----------|-------------|--------|---|--------------|
|       |                 |                                   | L         | T | P  |           | Exam  | Sessional |             | T      | S |              |
| 1     | FTBE/T/311      | Chemical Engg. Thermodynamics     | 3         | 0 | 0  | 31        | 100   |           | 900         | 3      |   | 27           |
| 2     | FTBE/T/312      | Food Packaging Technology         | 3         | 0 | 0  |           | 100   |           |             | 3      |   |              |
| 3     | FTBE/T/313      | Food proces Technology I          | 4         | 0 | 0  |           | 100   |           |             | 3      |   |              |
| 4     | FTBE/T/314      | Food proces Technology II         | 4         | 0 | 0  |           | 100   |           |             | 3      |   |              |
| 5     | FTBE/T/315      | Mechanical Operation              | 3         | 0 | 0  |           | 100   |           |             | 3      |   |              |
| 6     | FTBE/T/316      | Microbial Technology              | 3         | 0 | 0  |           | 100   |           |             | 3      |   |              |
| 7     | FTBE/S/311      | Microbial Technology Laboratory I | 0         | 0 | 4  |           |       | 100       |             |        | 3 |              |
| 8     | FTBE/EE/S/312   | Electrical Engineering Lab        | 0         | 0 | 3  |           |       | 100       |             |        | 3 |              |
| 9     | FTBE/Chem/S/313 | Physical Chemistry Lab            | 0         | 0 | 4  |           |       | 100       |             |        | 3 |              |
| Total | 9 Sub(6T+3S)    | 7 Dept.+<br>2 Non-Dept.           | 20        | 0 | 11 |           | 600   | 300       |             | 18     | 9 |              |

**Course Curricula for Four Year Degree Course in Food Technology and Biochemical Engineering :  
Third Year-Second Semester :**

| No.   | Subject Code      | Name of the Subject                   | Pds/ Week |   |    | Total Pds | Marks |           | Total marks | Credit |   | Total Credit |
|-------|-------------------|---------------------------------------|-----------|---|----|-----------|-------|-----------|-------------|--------|---|--------------|
|       |                   |                                       | L         | T | P  |           | Exam  | Sessional |             | T      | S |              |
| 1     | FTBE/T/321        | Food process Engineering              | 3         | 0 | 0  | 32        | 100   |           | 900         | 3      |   | 27           |
| 2     | FTBE/T/322        | Food Process Tech III                 | 4         | 0 | 0  |           | 100   |           |             | 3      |   |              |
| 4     | FTBE/T/323        | Project Planning , Layout & Economics | 3         | 0 | 0  |           | 100   |           |             | 3      |   |              |
| 5     | FTBE/T/324        | Biochemical Engg. I                   | 4         | 0 | 0  |           | 100   |           |             | 3      |   |              |
| 6     | FTBE/T/325        | Mass Transfer Operation I             | 3         | 0 | 0  |           | 100   |           |             | 3      |   |              |
| 3     | FTBE/T/326        | Chemical Engg. Kinetics               | 3         | 0 | 0  |           | 100   |           |             | 3      |   |              |
| 7     | FTBE/S/321        | Microbial Technology Laboratory II    | 0         | 0 | 4  |           |       | 100       |             |        | 3 |              |
| 8     | FTBE/S/322        | Biochemical Engg. & instrum. Lab I    | 0         | 0 | 4  |           |       | 100       |             |        | 3 |              |
| 9     | FTBE/ChE-ME/S/323 | Chemical & Mechanical Engg laboratory | 0         | 0 | 4  |           |       | 100       |             |        | 3 |              |
| Total | 9 Sub(6T+3S)      | 8 Dept.+<br>1 Non-Dept.               | 20        | 0 | 12 | 600       | 300   | 18        | 9           |        |   |              |

**Course Curricula for Four Year Degree Course in Food Technology and Biochemical Engineering :  
Fourth Year-First Semester :**

| No.   | Subject Code | Name of the Subject                           | Pds/ Week |   |    | Total Pds | Marks |           | Total marks | Credit |   | Total Credit |   |
|-------|--------------|---|-----------|---|----|-----------|-------|-----------|-------------|--------|---|--------------|---|
|       |              |   | L         | T | P  |           | Exam  | Sessional |             | T      | S |              |   |
| 1     | FTBE/T/411   | Food Process Tech IV                          | 4         | 0 | 0  | 27        | 100   |           | 700         | 3      |   | 21           |   |
| 2     | FTBE/T/412   | Instrumentation & Process Control             | 3         | 0 | 0  |           | 100   |           |             | 3      |   |              |   |
| 3     | FTBE/T/413   | Mass Transfer Operation II                    | 3         | 0 | 0  |           | 100   |           |             | 3      |   |              |   |
| 4     | FTBE/T/414   | Biochemical Engg II                           | 4         | 0 | 0  |           | 100   |           |             | 3      |   |              |   |
| 5     | FTBE/S/411   | Seminar                                       | 0         | 2 | 3  |           |       | 100       |             |        | 3 |              |   |
| 6     | FTBE/S/412   | Biochemical Engg. & Instrument. Laboratory II | 0         | 0 | 4  |           |       | 100       |             |        |   |              | 3 |
| 7     | FTBE/S/413   | Food Engg. & Quality Control Laboratory I     | 0         | 0 | 4  |           |       | 100       |             |        |   |              | 3 |
| Total | 7 Sub(4T+3S) | 7 Dept  | 14        | 2 | 11 |           | 400   | 300       |             | 12     | 9 |              |   |

**Course Curricula for Four Year Degree Course in Food Technology and Biochemical Engineering :  
Fourth Year-Second Semester :**

| No.   | Subject Code  | Name of the Subject                        | Pds/ Week |   |    | Total Pds | Marks |           | Total marks | Credit |   | Total Credit |
|-------|---------------|--|-----------|---|----|-----------|-------|-----------|-------------|--------|---|--------------|
|       |               |  | L         | T | P  |           | Exam  | Sessional |             | T      | S |              |
| 1     | FTBE/T/421    | Quality Control & Food safety              | 4         | 0 | 0  | 26        | 100   |           | 800         | 3      |   | 24           |
| 2     | FTBE/T/422    | Elective                                   | 3         | 0 | 0  |           | 100   |           |             | 3      |   |              |
| 3     | FTBE/T/423    | Waste Treatment Engg                       | 3         | 0 | 0  |           | 100   |           |             | 3      |   |              |
| 4     | FTBE/ME/T/424 | Industrial Management & Energy             | 4         | 0 | 0  |           | 100   |           |             | 3      |   |              |
| 5     | FTBE/E/421    | General Viva-Voce                          | 0         | 0 | 0  |           | 100   |           |             | 3      |   |              |
| 6     | FTBE/S/422    | Design / Project Planning                  | 0         | 0 | 4  |           |       | 100       |             |        | 3 |              |
| 7     | FTBE/S/423    | Food Analysis Laboratory                   | 0         | 0 | 4  |           |       | 100       |             |        | 3 |              |
| 8     | FTBE/S/424    | Food Engg. & Quality Control Laboratory II | 0         | 0 | 4  |           |       | 100       |             |        | 3 |              |
| Total | 8 Sub(4T+4S)  | 7 Dept+ 1 Non-Dept.                        | 14        | 0 | 12 |           | 500   | 300       |             | 15     | 9 |              |