

**Birla Vishvakarma Mahavidyalaya (An Autonomous Institution)**  
**Electronics Engineering Department and Electronics & Communication**  
**Engineering Department**  
**Programme Structure for**  
**Minor in Embedded Systems and IoT**

Can be Opted by: All UG Students Except B.Tech. (Electronics Engineering) and B.Tech. (Electronics and Communication Engineering) as per [AR for Minors / Honours](#)

| Sr. No.      | Course Code           | Name of Course                                     | L         | T        | P         | H         | C         |
|--------------|-----------------------|----------------------------------------------------|-----------|----------|-----------|-----------|-----------|
| 1            | <a href="#">MES01</a> | <a href="#">Fundamentals of Electronics</a>        | 3         | 0        | 2         | 5         | 4         |
| 2            | <a href="#">MES02</a> | <a href="#">Microprocessor and Microcontroller</a> | 3         | 0        | 2         | 5         | 4         |
| 3            |                       | Programme Elective I                               | 3         | 0        | 0         | 3         | 3         |
| 4            |                       | Programme Elective II                              | 3         | 0        | 0         | 3         | 3         |
| 5            | <a href="#">MES91</a> | <a href="#">Project</a>                            | 0         | 0        | 8         | 8         | 4         |
| <b>Total</b> |                       |                                                    | <b>12</b> | <b>0</b> | <b>12</b> | <b>24</b> | <b>18</b> |

**Pool of Courses for Programme Elective – I**

| Sr. No. | Course Code           | Name of Course                                                | L | T | P | H | C |
|---------|-----------------------|---------------------------------------------------------------|---|---|---|---|---|
| 1       | <a href="#">MES11</a> | <a href="#">Introduction to Embedded System Design</a>        | 3 | 0 | 0 | 3 | 3 |
| 2       | <a href="#">MES12</a> | <a href="#">Embedded System Designs with ARM</a>              | 3 | 0 | 0 | 3 | 3 |
| 3       | <a href="#">MES13</a> | <a href="#">Embedded System Designs</a>                       | 3 | 0 | 0 | 3 | 3 |
| 4       | <a href="#">MES14</a> | <a href="#">Embedded System, Design Verification and Test</a> | 3 | 0 | 0 | 3 | 3 |
| 5       | <a href="#">MES15</a> | <a href="#">Embedded Software Testing</a>                     | 3 | 0 | 0 | 3 | 3 |

**Pool of Courses for Programme Elective – II**

| Sr. No. | Course Code           | Name of Course                                                                 | L | T | P | H | C |
|---------|-----------------------|--------------------------------------------------------------------------------|---|---|---|---|---|
| 1       | <a href="#">MES16</a> | <a href="#">Introduction to Internet of Things</a>                             | 3 | 0 | 0 | 3 | 3 |
| 2       | <a href="#">MES17</a> | <a href="#">Design for Internet of Things</a>                                  | 3 | 0 | 0 | 3 | 3 |
| 3       | <a href="#">MES18</a> | <a href="#">Introduction to Industry 4.0 and Industrial Internet of Things</a> | 3 | 0 | 0 | 3 | 3 |
| 4       | <a href="#">MES19</a> | <a href="#">Advanced IoT Applications</a>                                      | 3 | 0 | 0 | 3 | 3 |