



**Course Name: Master of Computer Application (MCA) with Specialization in Gaming and Animation**  
**Course Structure**

| ADAMAS UNIVERSITY<br>SCHOOL OF ENGINEERING & TECHNOLOGY<br>PG PROGRAM: Master of Computer Application (MCA)<br>In Gaming and Animation<br>SEMESTER I |                |             |   |           |          |           |                  |           |
|--|----------------|-------------|---|-----------|----------|-----------|------------------|-----------|
| Sl. No   | Type of Course | Course Code | Course Title                              | L         | T        | P         | Contact Hrs./Wk. | Credits   |
| 1  | Theory         |             | Computer Programming with Python          | 3         | 0        | 0         | 3                | 3         |
| 2  | Theory         | SMA51141    | Numerical & Statistical Methods           | 3         | 0        | 0         | 3                | 3         |
| 3  | Theory         | ECS51103    | Computer Organization & Architecture      | 3         | 0        | 0         | 3                | 3         |
| 4  | Theory         |             | Software Engineering                      | 3         | 0        | 0         | 3                | 3         |
| 5  | Theory         |             | HSS– I (English Communication)            | 3         | 0        | 0         | 3                | 2         |
| 6  | Theory         |             | Mobile Applications using Android/IoS     | 3         | 0        | 0         | 3                | 3         |
| 7  | Practical      |             | Computer Programming with Python Lab      | 0         | 0        | 3         | 3                | 2         |
| 8  | Practical      | SMA51241    | Numerical & Statistical Methods Lab       | 0         | 0        | 3         | 3                | 2         |
| 9  | Practical      |             | Computer Organization & Architecture Lab  | 0         | 0        | 3         | 3                | 2         |
| 10   | Practical      |             | Mobile Applications using Android/IoS Lab | 0         | 0        | 3         | 3                | 2         |
| <b>Total</b>   |                |             |   | <b>18</b> | <b>0</b> | <b>12</b> | <b>30</b>        | <b>25</b> |

| ADAMAS UNIVERSITY<br>SCHOOL OF ENGINEERING & TECHNOLOGY<br>PG PROGRAM: Master of Computer Application (MCA)<br>In Gaming and Animation<br>SEMESTER II |                |             |   |           |          |           |                  |           |
|---|----------------|-------------|---|-----------|----------|-----------|------------------|-----------|
| Sl. No  | Type of Course | Course Code | Course Title                              | L         | T        | P         | Contact Hrs./Wk. | Credits   |
| 1   | Theory         |             | Data Structures with Python               | 3         | 0        | 0         | 3                | 3         |
| 2   | Theory         |             | Object Oriented Programming with Java     | 3         | 0        | 0         | 3                | 3         |
| 3   | Theory         | ECS51106    | Operating System                          | 3         | 0        | 0         | 3                | 3         |
| 4   | Theory         | ECS51108    | Database Management System                | 3         | 0        | 0         | 3                | 3         |
| 5   | Theory         |             | Data Warehousing & Data Analytics         | 3         | 0        | 0         | 3                | 3         |
| 6   | Practical      |             | Data Structures with Python Lab.          | 0         | 0        | 3         | 3                | 2         |
| 7   | Practical      | ECS51208    | Database Management System Lab            | 0         | 0        | 3         | 3                | 2         |
| 8   | Practical      |             | Object Oriented Programming with Java Lab | 0         | 0        | 3         | 3                | 2         |
| 9   | Practical      | ECS51206    | Operating System Lab                      | 0         | 0        | 3         | 3                | 2         |
| <b>Total</b>  |                |             |   | <b>15</b> | <b>0</b> | <b>12</b> | <b>27</b>        | <b>23</b> |

**Total Credits (First Year): 48**

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|---|----------------|-------------|--|-----------|----------|-----------|------------------|-----------|
| Sl. No  | Type of Course | Course Code | Course Title   | L         | T        | P         | Contact Hrs./Wk. | Credits   |
| 1   | Theory         |             | Web Technology   | 3         | 0        | 0         | 3                | 3         |
| 2   | Theory         | EEEC52101   | Data Communication & Computer Network                        | 3         | 0        | 0         | 3                | 3         |
| 3   | Theory         |             | Cyber Security   | 3         | 0        | 0         | 3                | 3         |
| 4   | Theory         |             | Game design (Specialized Course I)                           | 3         | 0        | 0         | 3                | 3         |
| 5   | Theory         |             | Maya modelling rigging and animation (Specialized Course II) | 3         | 0        | 0         | 3                | 3         |
| 6   | Practical      |             | Cyber Security Lab   | 0         | 0        | 3         | 3                | 2         |
| 7   | Practical      |             | Web Technology Lab   | 0         | 0        | 3         | 3                | 2         |
| 8   | Practical      |             | Game Design Lab using CONSTRUCT (Specialized Lab Course I)   | 0         | 0        | 3         | 3                | 2         |
| 9   |                |             | Project  | 0         | 0        | 3         | 3                | 2         |
| <b>Total</b>  |                |             |  | <b>15</b> | <b>0</b> | <b>12</b> | <b>27</b>        | <b>23</b> |

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|--|----------------|-------------|--|----------|----------|----------|------------------|-----------|
| Sl. No   | Type of Course | Course Code | Course Title   | L        | T        | P        | Contact Hrs./Wk. | Credits   |
| 1  | Theory         |             | Game Development (Specialized Course III)  | 3        | 0        | 0        | 3                | 3         |
| 2  | Theory         |             | 3D Character Animation by Adobe Mixamo <b>OR</b> Virtual Augmented Reality (Specialized Course IV) | 3        | 0        | 0        | 3                | 3         |
| 3  | Practical      |             | Game Development Lab by UNITY (Specialized Lab Course II)  | 0        | 0        | 3        | 3                | 2         |
| 4  | Seminar        |             | Seminar  | 0        | 2        | 0        | 2                | 2         |
| 5  | Project        |             | Project-II   | 0        | 0        | 6        | 6                | 4         |
| <b>Total</b>   |                |             |  | <b>6</b> | <b>2</b> | <b>9</b> | <b>17</b>        | <b>14</b> |

**Total Credits (Second Year): 37**

**Total Credits (over two years): 85**