



**College of Health Sciences**

**School of Rehabilitation and Medical Sciences**

**Department of Medical Sciences**

**Emergency Medical Sciences**

Bachelor of Science in Emergency Medical Services

(BSEMS) Study Modules

| <b>Bachelor of Science in Emergency Medical Services - YEAR - 1</b> |                     |                                                       |                     |                                                          |                     |
|---------------------------------------------------------------------|---------------------|-------------------------------------------------------|---------------------|----------------------------------------------------------|---------------------|
| <b>FALL SEMESTER</b>                                                |                     | <b>SPRING SEMESTER</b>                                |                     | <b>SUMMER SEMESTER</b>                                   |                     |
| <b>Course Title</b>                                                 | <b>Credit Hours</b> | <b>Course Title</b>                                   | <b>Credit Hours</b> | <b>Course Title</b>                                      | <b>Credit Hours</b> |
| Arabic Language I                                                   | 2                   | English Language II                                   | 2                   | Pathophysiology                                          | 3                   |
| English Language I                                                  | 2                   | Arabic Language II                                    | 2                   | Microbiology and Immunology                              | 3                   |
| General Biology                                                     | 4                   | Fundamentals of Emergency Medical Services            | 2                   | Microbiology and Immunology Lab                          | 0                   |
| General Biology                                                     | 0                   | Fundamentals of Emergency Medical Services Laboratory | 1                   |                                                          |                     |
| Fundamentals of Chemistry                                           | 4                   | Biochemistry                                          | 3                   |                                                          |                     |
| Fundamentals of Chemistry                                           | 0                   | Biochemistry Laboratory                               | 0                   |                                                          |                     |
| Anatomy and Physiology I                                            | 3                   | Introduction to Oman Healthcare System                | 1                   |                                                          |                     |
| Anatomy and Physiology I Laboratory                                 | 1                   | Anatomy and Physiology II                             | 3                   |                                                          |                     |
|                                                                     |                     | Anatomy and Physiology II Laboratory                  | 1                   |                                                          |                     |
| <b>Bachelor of Science in Emergency Medical Services - YEAR - 2</b> |                     |                                                       |                     |                                                          |                     |
| <b>FALL SEMESTER</b>                                                |                     | <b>SPRING SEMESTER</b>                                |                     | <b>SUMMER SEMESTER</b>                                   |                     |
| <b>Course Title</b>                                                 | <b>Credit Hours</b> | <b>Course Title</b>                                   | <b>Credit Hours</b> | <b>Course Title</b>                                      | <b>Credit Hours</b> |
| Pharmacology 1                                                      | 2                   | Medical Management                                    | 2                   | Clinical Placement -1<br>Ambulance Stations              | 2                   |
| Pharmacology 1 Laboratory                                           | 1                   | Medical Management Laboratory                         | 1                   | Clinical Placement -2<br>Ambulance Stations              | 2                   |
| Physical Assessment Laboratory 1                                    | 2                   | Cardiopulmonary Management                            | 2                   |                                                          |                     |
| Health Informatics                                                  | 1                   | Cardiopulmonary Management Laboratory                 | 1                   |                                                          |                     |
| Airway Management                                                   | 2                   | Pharmacology 2                                        | 2                   |                                                          |                     |
| Airway Management Lab                                               | 1                   | Pharmacology 2 Laboratory                             | 1                   |                                                          |                     |
| Medical Legal aspects and Ethics in EMS                             | 2                   | Computer Skills                                       | 2                   |                                                          |                     |
| First Aid and BLS Laboratory                                        | 1                   | EMS Operations 1                                      | 1                   |                                                          |                     |
| Trauma Management 1                                                 | 2                   | EMS Operations 1 Laboratory                           | 2                   |                                                          |                     |
| Trauma Management 1 Laboratory                                      | 1                   |                                                       |                     |                                                          |                     |
|                                                                     |                     |                                                       |                     |                                                          |                     |
| <b>Bachelor of Science in Emergency Medical Services - YEAR - 3</b> |                     |                                                       |                     |                                                          |                     |
| <b>FALL SEMESTER</b>                                                |                     | <b>SPRING SEMESTER</b>                                |                     | <b>SUMMER SEMESTER</b>                                   |                     |
| <b>Course Title</b>                                                 | <b>Credit Hours</b> | <b>Course Title</b>                                   | <b>Credit Hours</b> | <b>Course Title</b>                                      | <b>Credit Hours</b> |
| ECG Interpretation                                                  | 2                   | Biostatistics                                         | 2                   | Clinical Placement -5<br>Hosp: ICU, CCU and Psychiatrics | 2                   |
| ECG Interpretation Laboratory                                       | 1                   | Islamic Civilization                                  | 3                   | Entrepreneurship, Innovation and<br>Creativity           | 3                   |
| Research Epidemiology and Evidence<br>Based Practice                | 3                   | Pediatric Medical and Trauma Management               | 2                   | Entrepreneurship, Innovation and<br>Creativity Lab       | 0                   |
| Trauma Management II                                                | 2                   | Pediatric Medical and Trauma Management Laboratory    | 1                   |                                                          |                     |
| Trauma Management II Laboratory                                     | 1                   | Clinical Placement 4 Medical, Surgical & pediatrics   | 2                   |                                                          |                     |
| Clinical Placement -3 Emergency<br>Departments                      | 2                   | Career Counselling                                    | 1                   |                                                          |                     |
| Special Patient Population                                          | 2                   | School Elective 1                                     | 2                   |                                                          |                     |
| Special Patient Population Laboratory                               | 1                   | Physical Assessment Laboratory 2                      | 2                   |                                                          |                     |
|                                                                     |                     |                                                       |                     |                                                          |                     |

| <b>Bachelor of Science in Emergency Medical Services - YEAR - 4</b> |                     |                                                |                     |                                                          |                     |
|---------------------------------------------------------------------|---------------------|------------------------------------------------|---------------------|----------------------------------------------------------|---------------------|
| <b>FALL SEMESTER</b>                                                |                     | <b>SPRING SEMESTER</b>                         |                     | <b>SUMMER SEMESTER</b>                                   |                     |
| <b>Course Title</b>                                                 | <b>Credit Hours</b> | <b>Course Title</b>                            | <b>Credit Hours</b> | <b>Course Title</b>                                      | <b>Credit Hours</b> |
| Graduation Research Project                                         | 6                   | Advanced Trauma Management                     | 2                   | EMS Operations 2<br>(EMS Crisis and Disaster management) | 1                   |
| Advanced Medical Management                                         | 2                   | Advanced Trauma Management Laboratory          | 1                   | EMS Operations 2 Laboratory                              | 2                   |
| Advanced Medical Management Laboratory                              | 1                   | Advanced Cardiopulmonary management            | 2                   | Clinical Placement – 7<br>Emergency Rooms & OTs          | 2                   |
| EMS Education                                                       | 2                   | Advanced Cardiopulmonary management Laboratory | 1                   |                                                          |                     |
| School Elective 2                                                   | 2                   | Advanced Seminar in Health Sciences            | 1                   |                                                          |                     |
| Clinical Placement – 6<br>Ambulance Stations                        | 2                   | University Elective                            | 3                   |                                                          |                     |
|                                                                     |                     | Global Health                                  | 2                   |                                                          |                     |
| <b>Bachelor of Science in Emergency Medical Services - YEAR - 5</b> |                     |                                                |                     |                                                          |                     |
| <b>FALL SEMESTER</b>                                                |                     | <b>SPRING SEMESTER</b>                         |                     | <b>SUMMER SEMESTER</b>                                   |                     |
| <b>Course Title</b>                                                 | <b>Credit Hours</b> | <b>Course Title</b>                            | <b>Credit Hours</b> | <b>Course Title</b>                                      | <b>Credit Hours</b> |
| Professional Review Course and<br>Professional Exit Exam            | 1                   |                                                |                     |                                                          |                     |
| Internship                                                          | 12                  |                                                |                     |                                                          |                     |

**Total Course credits (BSEMS) per academic year:**

| <b>Year</b>           | <b>FALL SEMESTER</b> | <b>SPRING SEMESTER</b> | <b>SUMMER SEMESTER</b> | <b>TOTAL</b> |
|-----------------------|----------------------|------------------------|------------------------|--------------|
| <b>1<sup>st</sup></b> | <b>16</b>            | <b>15</b>              | <b>6</b>               | <b>37</b>    |
| <b>2<sup>nd</sup></b> | <b>15</b>            | <b>14</b>              | <b>4</b>               | <b>33</b>    |
| <b>3<sup>rd</sup></b> | <b>14</b>            | <b>15</b>              | <b>5</b>               | <b>34</b>    |
| <b>4<sup>th</sup></b> | <b>15</b>            | <b>12</b>              | <b>5</b>               | <b>32</b>    |
| <b>5<sup>th</sup></b> | <b>13</b>            | <b>0</b>               | <b>0</b>               | <b>13</b>    |

**TOTAL CREDIT HOURS: 149**