

# Program Specification for MD Degree: Urology

**Program code:** URL 623

**Department offering the program:** Department of Urology

**Program Coordinators:** Prof. Attalah Shaaban  
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Prof. Bassem Wadie  
Dr.. Yasser Osman

**External evaluators:** Prof. Ahmed Hano  
Professor of Urology, Alexandria University

## I. Program aims

The program is a professional degree that enables candidates to master the practice in the area of urology. The candidate should achieve advanced levels of basic knowledge, clinical and surgical skills of all aspects of urology practice, interact with community problems, and promote their medical standards through engaging in continuous medical education. The program also aims to introduce the candidate to advanced level of scientific medical research.

## II. Intended learning outcomes of the program (ILOs)

**A. Knowledge and understanding: By the end of the program the candidate should;**

- 1) Recognize all the scientific facts related to Urology including the male and female urinary tract and the male genital system.
- 2) Identify and discuss common & rare surgical problems.
- 3) Distinguish the underlying pathologic processes for common urologic diseases.
- 4) Describe different treatment modalities for common & rare surgical problems, met in urologic practice.
- 5) Understand the basic & advanced concepts of urologic surgeries and the aims to be reached.

**B. Intellectual skills: By the end of the program the candidate should be able to;**

- 1) Analyze symptoms & signs and construct a differential diagnosis for common & rare urologic problems
- 2) Design an appropriate diagnostic plan for evaluation of common & rare urologic problems.

- 3) Interpret the results of urologic investigations and correlate the results together to reach a probable diagnosis.
- 4) Set a treatment plan for the diagnosed problem taking into consideration the risks and benefits as well as cultural and individual needs of the patients.

**C. Professional and practical skills: By the end of the program the candidates should be able independently to;**

- 1) Collect clinical history taking from the patient and master its skills taking into consideration other medical and surgical problems the patient might have.
- 2) Perform detailed examination of the urinary and genital tracts in males and females.
- 3) Perform advanced urologic investigations that help in final diagnosis of urologic problems encountered.
- 4) Evaluate, categorize, and manage all urologic emergencies.
- 5) Perform advanced urologic surgeries to manage all urologic problems.

**D. General and transferable skills: By the end of the program the candidates should be able to;**

- 1) Communicate efficiently with patients to acquire important information during history taking.
- 2) Co-operate efficiently with other health care providers.
- 3) Sharpen administrative work skills during running the daily ward activities.
- 4) Sharpen computer skills necessary for using medical databases, preparing medical presentations.
- 5) Sharpen scientific reading and writing skills enabling him to participate in scientific research.
- 6) Sharpen social and communication skills to present clinical cases and scientific arguments.

### **III. Academic standards.**

**External references for standards:**

- The curriculum offered by the European Board of Urology (EBU)

The program also includes some areas of training not mentioned in the aforementioned programs.

## IV. Program structure and contents.

### المقررات الدراسية وتوزيع الساعات المعتمدة

| الساعات<br>المعتمدة | الكود                   | Course            | المقررات  |  |
|---------------------|-------------------------|-------------------|---|--|
| ٥                   | URL 601                 | Surgical Anatomy  | التشريح الجراحي   | الفصل الدراسي<br>الأول                     |
|                     | URL 605                 | Applied Pathology | الباثولوجيا التطبيقية   |  |
|                     |                         |                   | دراسات متقدمة في المجال الطبي:<br>- طرق البحث العلمي<br>- الاحصاء الطبي<br>- استخدام الحاسب الالى في<br>العلوم الطبية                               |  |
| ٢٥                  | URL 623                 | Urology           | جراحة المسالك البولية   | الفصل الدراسي<br>الثاني والثالث<br>والرابع |
| ١٥                  | URL 623 C               |                   | <ul style="list-style-type: none"> <li>• برنامج التدريب<br/>الكلينيكي والعملي في<br/>جراحة المسالك البولية</li> <li>• أنشطة علمية مختلفة</li> </ul> | كراسة الأنشطة                              |
| ١٥                  |                         |                   |   | الرسالة                                    |
| ٦٠                  | اجمالي الساعات المعتمدة |                   |   |  |

### (Ppractical) Training Program

#### · Basic Training:

According to the urology department Faculty of Medicine, Mansoura University Bylaws for Post Graduate Programs, all students should have an advanced surgical training for 48 months. During this period the students will attend the surgical anatomy and applied pathology courses as well as the urology course. They also should choose between elective courses.

· **MD Thesis:**

All MD-degree students should prepare a thesis in Urology. The department and the ethical committees and IRB (Internal review board) must approve the protocol of the research. The thesis may include a review part and a research part. The thesis supervised by one or more senior staff members and may include other specialties according to the nature of the research. The thesis should be evaluated and approved by a committee of three professors including one of the supervisors and an external professor.

**Scientific Activities:**

The students should participate in the scientific activities of the departments such as:

- Journal club once every week.
- Seminars (including recent topics and controversial issues) once weekly.  
Students are expected to participate in the discussions.
- Scientific meetings arranged by the department
- Attendance of Thesis discussions
- Morbidity and mortality reports.

Each activity is monitored and given credit points registered in a special section in the residency-training logbook. The student should collect the required points before being allowed to sit for final exam.

## **V. Regulations for progression and program completion**

After collecting the required credit points for the respective courses, the first phase of the urologic training, and the scientific activities, the student will be eligible to sit for the first part examination. In case the student fails to pass the examination, he may proceed in the clinical training and can resubmit for the next examination. After passing the first part, the student submits a protocol for MD Thesis at the beginning of the second part. Before submitting to the final examination he/she should finish the thesis and get approval, complete phase 2 of special training program, and collect the required credit points. The candidate will receive the degree after passing this final examination. MD degree should be obtained within a maximum of 6 years after registration date.

## VI. Assessment

### Supervision & Monitoring of the Training Program:

According to the Faculty of Medicine, Mansoura University Bylaws for Residency Training Programs, professors carry continuous assessment during the program. A training program logbook will be kept for each student to document all his/her clinical, laboratory and/or operative/procedural activities as well as his/her participation in different scientific activities. The head of the department should allow the students to undergo the final examination when they complete their training program and collect the credit points needed.

### A: Assessment Tools:

#### نظام الامتحان وتوزيع الدرجات

#### الفصل الدراسي الأول

| المقرر                | الاختبار                               | اجمالي |
|-----------------------|--|--------|
| التشريح الجراحي       | اختبار تحريري (ورقتان) مدته ثلاث ساعات | ١٠٠    |
| الباثولوجيا التطبيقية |  | ١٠٠    |

#### الامتحان النهائي الشامل

| المقرر                | الاختبار  | الدرجة          |      |          | اجمالي |
|-----------------------|---|-----------------|------|----------|--------|
|                       |   | تحريري          | شفهي | إكلينيكي |        |
| جراحة المسالك البولية | اختباران تحريريان مدة كل منهما ثلاث ساعات<br>+ امتحان شفهي + امتحان إكلينيكي + اختبار عملي<br>(عمليات جراحية ومناظير) | ١٢٠<br>+<br>١٢٠ | ١٠٠  | ١٠٠      |        |
| وصف حالة              | إختبار تحريري مدته ساعة ونصف  | ٦٠              |      |          |        |
| المقرر الإختياري      | إختبار تحريري مدته ساعة   | ٣٠              |      |          |        |
| اجمالي الدرجة         |   |                 |      |          | ٦٣٠    |

**Curriculum of MD Degree in Genitourinary Surgery**  
**Faculty of Medicine, Mansoura University**

**Students should fulfill a total of 25 Credit Hours:**

**1. Obligatory subjects: 24 Credit Hours.**

**2. Elective Subjects: 1 Credit Hour each**

**Obligatory Courses:**

|    | <b>CODE</b> | <b>COURSE</b>                              | <b>CREDIT HOUR</b> |
|----|-------------|--|--------------------|
| 1  | URL-623-1   | Trauma and urologic emergencies            | 2                  |
| 2  | URL-623-2   | Endourology and urolithiasis               | 2                  |
| 3  | URL-623-3   | Voiding dysfunction and urodynamics        | 2                  |
| 4  | URL-623-4   | Prostate                                   | 2                  |
| 5  | URL-623-5   | Adrenal and renovascular hypertension      | 1                  |
| 6  | URL-623-6   | Laparoscopy in urology                     | 2                  |
| 7  | URL-623-7   | Reconstructive surgery                     | 1                  |
| 8  | URL-623-8   | Obstructive uropathy                       | 1                  |
| 9  | URL-623-9   | Infection of the G.U.T                     | 1                  |
| 10 | URL-623-10  | Urologic oncology                          | 4                  |
| 11 | URL-623-11  | Renal failure and renal transplantation    | 1                  |
| 12 | URL-623-12  | Pediatric urology and congenital anomalies | 3                  |
| 13 | URL-623-13  | Reproductive and sexual dysfunctions       | 2                  |

**Elective courses**

|    |              |                                   |   |
|----|--------------|-----------------------------------|---|
| 14 | URL 623 -PED | Advanced pediatric urology Course | 1 |
| 15 | URL 623 END  | Advanced endourology Course       | 1 |
| 16 | URL 623 ONC  | Advanced Uro-oncology Course      | 1 |
| 17 | URL 623 DYN  | Advanced urodynamic course        | 1 |

|   | <b>CODE</b>  | <b>CREDIT<br/>HOUR</b> | <b>COURSE</b>                   |
|---|--|------------------------|---------------------------------|
| 1 | URL-623-1  | 1                      | Trauma and urologic emergencies |
|   | Trauma to the: kidney I, kidney II, bladder, ureter, urethra, genitalia. |                        |                                 |

|   | <b>CODE</b>   | <b>CREDIT<br/>HOUR</b> | <b>COURSE</b>                |
|---|---|------------------------|------------------------------|
| 2 | URL-623-2   | 2                      | Endourology and urolithiasis |
|   | Epidemiology, Mineral metabolism, Pathophysiology I, Pathophysiology II.<br>Medical evaluation I, Medical evaluation II. ESWL: Endo-urological treatment I,<br>Endo-urological treatment II. Surgical treatment I, Surgical treatment II. |                        |                              |

|   | <b>CODE</b>  | <b>CREDIT<br/>HOUR</b> | <b>COURSE</b>                       |
|---|--|------------------------|-------------------------------------|
| 3 | URL-623-3  | 2                      | Voiding dysfunction and urodynamics |
|   | Physiology & pharmacology of bladder & urethra, Pathophysiology &<br>classification of voiding dysfunction, female urology and post prostatectomy<br>incontinence. |                        |                                     |

|   | <b>CODE</b>  | <b>CREDIT<br/>HOUR</b> | <b>COURSE</b> |
|---|--|------------------------|---------------|
| 4 | URL-623-4  | 2                      | Prostate      |
|   | Epidemiology, aetiology, clinical evaluation, pathology, treatment I, treatment<br>II. |                        |               |

|   | <b>CODE</b>   | <b>CREDIT<br/>HOUR</b> | <b>COURSE</b>                         |
|---|---|------------------------|---------------------------------------|
| 5 | URL-623-5   | 1                      | Adrenal and renovascular hypertension |
|   | Renovascular hypertension, renovascular surgery & interventional radiology. |                        |                                       |

|   | <b>CODE</b>  | <b>CREDIT<br/>HOUR</b> | <b>COURSE</b>          |
|---|--|------------------------|------------------------|
| 6 | URL-623-6  | 2                      | Laparoscopy in urology |
|   | Basic laparoscopy including anatomical background, physiologic and anesthetic considerations. Port ergonomics, techniques, indications and complications |                        |                        |

|   | <b>CODE</b>  | <b>CREDIT<br/>HOUR</b> | <b>COURSE</b>          |
|---|--|------------------------|------------------------|
| 7 | URL-623-7  | 1                      | Reconstructive surgery |
|   | Basic reconstruction of the renal pelvis, urinary bladder, urethra and genitalia |                        |                        |

|   | <b>CODE</b>  | <b>CREDIT<br/>HOUR</b> | <b>COURSE</b>        |
|---|--|------------------------|----------------------|
| 8 | URL-623-8  | 1                      | Obstructive uropathy |
|   | Extrinsic ureteric obstruction, Pathophysiology of upper & lower UT obstruction. |                        |                      |

|   | <b>CODE</b>   | <b>CREDIT<br/>HOUR</b> | <b>COURSE</b>          |
|---|---|------------------------|------------------------|
| 9 | URL-623-9   | 1                      | Infection of the G.U.T |
|   | Incidence, epidemiology, pathogenesis, diagnosis & imaging, infections of UT, drugs pregnancy, prostatitis I, prostatitis II, interstitial cystitis, parasitic disease, fungal infections, T.B. |                        |                        |

|    | <b>CODE</b>  | <b>CREDIT<br/>HOUR</b> | <b>COURSE</b>     |
|----|--|------------------------|-------------------|
| 10 | URL-623-10   | 4                      | Urologic oncology |
|    | Molecular biology of carcinogenesis: Part I, Part II.<br>Kidney tumors: I, RCC, natural history & diagnosis, II: Update on pathology, III: treatment, IV: treatment of tumors with venous thrombus, V: Willm's tumors. Urothelial tumours, prostatic cancer, testicular tumours. |                        |                   |



|    | <b>CODE</b>   | <b>CREDIT<br/>HOUR</b> | <b>COURSE</b>                           |
|----|---|------------------------|---|
| 11 | URL-623-11  | 1                      | Renal failure and renal transplantation |
|    | Renal transplantation I: end stage renal disease & treatment options. II Preoperative preparation, III: Surgical techniques, Vascular urological complications of renal transplantation, rejection after renal transplantation, Immuno-suppression. |                        |   |

|    | <b>CODE</b>   | <b>CREDIT<br/>HOUR</b> | <b>COURSE</b>                              |
|----|---|------------------------|--|
| 12 | URL-623-12  | 3                      | Pediatric urology and congenital anomalies |
|    | Embryology of GUT, congenital anomalies of kidney & ureter, congenital anomalies of bladder & urethra, congenital anomalies of genitalia, neonatal urological emergencies, pediatric UT I. I, pediatric UT I. II, VUR. I, VUR. II, posterior urethral valves, hypospadias I, hypospadias II, exstrophy & epispadias. I, exstrophy & epispadias. II, pediatric urolithiasis, pediatric neurogenic & nonneurogenic voiding dysfunction, enuresis. |                        |  |

|    | <b>CODE</b>  | <b>CREDIT<br/>HOUR</b> | <b>COURSE</b>                        |
|----|--|------------------------|--------------------------------------|
| 13 | URL-623-13   | 2                      | Reproductive and sexual dysfunctions |
|    | Physiology of hypothalamic-pituitary function Physiology of male reproduction (testis, epid, vas, male infertility: etiology, evaluation, varicocele, treatment, physiology of erection & evaluation of ED, medical treatment of ED, surgical treatment of ED, priapism. |                        |                                      |

|    | <b>CODE</b>   | <b>CREDIT<br/>HOUR</b> | <b>COURSE</b>                     |
|----|---|------------------------|-----------------------------------|
| 14 | URL 623 PED   | 1                      | Advanced pediatric urology Course |
|    | <ul style="list-style-type: none"> <li>• Complex reconstructive procedures in the pediatric patients.</li> <li>• Controversies in management of pediatric disorders.</li> </ul> |                        |                                   |

|    | <b>CODE</b>   | <b>CREDIT<br/>HOUR</b> | <b>COURSE</b>               |
|----|---|------------------------|-----------------------------|
| 15 | URL 623 END   | 1                      | Advanced endourology Course |
|    | <ul style="list-style-type: none"> <li>• Complex laparoscopic reconstructive procedures.</li> <li>• Current application of robotic technology in the field of urology.</li> </ul> |                        |                             |

|    | <b>CODE</b>   | <b>CREDIT<br/>HOUR</b> | <b>COURSE</b>                |
|----|---|------------------------|------------------------------|
| 16 | URL 523 ONC   | 1                      | Advanced Uro-oncology Course |
|    | <ul style="list-style-type: none"> <li>• Molecular biology carcinogenesis</li> <li>• Gene therapy</li> <li>• Controversies in management of urologic oncology.</li> </ul> |                        |                              |

|    | <b>CODE</b>   | <b>CREDIT<br/>HOUR</b> | <b>COURSE</b>              |
|----|---|------------------------|----------------------------|
| 17 | URL 523 DYN   | 1                      | Advanced urodynamic course |
|    | <ul style="list-style-type: none"> <li>• Female urethral reconstruction.</li> <li>• Treatment options of male post prostatectomy incontinence.</li> </ul> |                        |                            |

**.S. All courses` specifications are attached in Appendix III.**

[illegible]