

# Program Specification for Master Degree: Urology

**Program code:** URL 523

**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 specialize in the area of urology. The candidate should achieve satisfactory 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 the basics 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 the basic scientific facts related to Urology including the male and female urinary tract and the male genital system.
- 2) Identify and discuss common surgical problems.
- 3) Distinguish the underlying pathologic processes for common urologic diseases.
- 4) Describe different treatment modalities for common surgical problems, generally met in urologic practice.
- 5) Understand the basic concepts of urologic surgery and aims to be reached.

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

- 1) Analyze symptoms and signs and construct a differential diagnosis for common urologic problems
- 2) Design an appropriate diagnostic plan for evaluation of common 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 candidate should be able 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 tract in males and females as well as the genital tract.
- 3) Perform basic urologic investigations that help in preliminary diagnosis of urologic problems encountered.
- 4) Evaluate, categorize, and manage all urologic emergencies with the help of a consultant.
- 5) Perform basic urologic surgeries to manage common 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) Gain administrative work skills during running the daily ward activities.
- 4) Acquire computer skills necessary for using medical databases, preparing medical presentations.
- 5) Gain scientific reading and writing skills enabling him to participate in scientific research.
- 6) Develop 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 admission requirements.**

According the Faculty of Medicine, Mansoura University Bylaws for Post Graduate Programs, applicants should have MBBCh or equivalent degree. Training prior to registration may be a pre requisite, according to departmental and hospital evaluation.

## V. Program structure and contents.

### المقررات الدراسية وتوزيع الساعات المعتمدة

الساعات المعتمدة	الكود	Course	المقررات	
٥	URL 503	Physiology	الفسيولوجيا	الفصل الدراسي الأول
	URL 504	Biochemistry	الكيمياء الحيوية	
	URL 506	Pharmacology	الفارماكولوجيا	
	URL 505	Pathology	الباثولوجيا	
	URL 507	Microbiology and Immunology	الميكروبيولوجيا والمناعة الطبية	
	URL 501	Anatomy	التشريح	
	URL 502	Histology	الهستولوجيا	
	URL 520 URL 520 C	Surgery	الجراحة العامة	
١٨	URL 523	Urology	جراحة المسالك البولية	الفصل الدراسي الثاني والثالث والرابع
١٤	URL 523 C		<ul style="list-style-type: none"> <li>برنامج التدريب الاكلينيكي والعملية في جراحة المسالك البولية</li> </ul>	كراسة الأنشطة
٢			<ul style="list-style-type: none"> <li>أنشطة علمية مختلفة</li> </ul>	
٦				الرسالة
٤٥				اجمالي الساعات المعتمدة

### Residency (practical) Training Program

#### · Surgical Training:

According to the urology department Faculty of Medicine, Mansoura University Bylaws for Post Graduate Programs all the students should have a basic surgical training for 48 months. During this period the students will attend the basic sciences as well as the urology courses as well as the general surgery course. They also should choose between the elective courses

· **Master Thesis:**

All master-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.

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

After collecting the required credit points for the respective courses, the first phase of the residency 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 Master Thesis at the beginning of the second part. Before submitting to the final examination he/she should finish the thesis and get approval, complete training program, and collect the required credit points. The candidate will receive the degree after passing this final examination. Master degree should be obtained within a maximum of 6 years after registration date.

## **VII. Assessment**

### **Supervision & Monitoring of the Training Program:**

According to the Faculty of Medicine, Mansoura University Bylaws for Residency Training

Programs, academic staff carry continuous assessment during the program. A residency 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

اجمالي	الدرجة			الاختبار	المقرر
	إكلينيكي	شفهي	تحريري		
		٤٠	٦٠	اختبار تحريري (٣ ورقات) مدته ثلاث ساعات + امتحان شفهي	الفسولوجيا
		+	+		الكيمياء الحيوية
		٤٠	٦٠		الفارماكولوجيا
		+	+	اختبار تحريري (ورقتان) مدته ثلاث ساعات + امتحان شفهي	الباثولوجيا
		٤٠	٦٠		الميكروبيولوجيا
		٦٠	٩٠		والمناعة
		٦٠	٩٠	اختبار تحريري (ورقتان) مدته ثلاث ساعات + امتحان شفهي	التشريح
		+	+		الهستولوجيا
		٦٠	٩٠		
	٦٠	٦٠	١٨٠	اختبار تحريري مدته ثلاث ساعات + امتحان شفهي + امتحان إكلينيكي	الجراحة العامة
١٢٠٠	اجمالي الدرجة				

#### الامتحان النهائي الشامل

اجمالي	الدرجة			الاختبار	المقرر
	إكلينيكي	شفهي	تحريري		
	١٥٠	١٥٠	١٥٠	اختباران تحريريان مدة كل منهما ثلاث ساعات + امتحان شفهي + امتحان إكلينيكي	جراحة المسالك البولية
			+		
			١٥٠	اختبار تحريري مدته ساعة	المقرر الإختباري
			٤٠		
٦٤٠	اجمالي الدرجة				

**Curriculum of urology care of Master Degree in Genitourinary Surgery**  
**Faculty of Medicine, Mansoura University**

**Students should fulfill a total of 18 Credit Hours:**

- 1. Obligatory subjects: 17 Credit Hours.**
- 2. Elective Subjects: 1 Credit Hour each**

**Obligatory Courses:**

	<b>CODE</b>	<b>Urology COURSE</b>	<b>CREDIT HOUR</b>
1	URL-523-1	Trauma and urologic emergencies	1
2	URL-523-2	Endourology and urolithiasis	1
3	URL-523-3	Voiding dysfunction and urodynamics	1
4	URL-523-4	BPH	1
5	URL-523-5	Adrenal and renovascular hypertension	1
6	URL-523-6	Laparoscopy in urology	1
7	URL-523-7	Reconstructive surgery	1
8	URL-523-8	Obstructive uropathy	1
9	URL-523-9	Infection of the G.U.T	1
10	URL-523-10	Urologic oncology	4
11	URL-523-11	Renal failure and renal transplantation	1
12	URL-523-12	Pediatric urology and congenital anomalies	2
13	URL-523-13	Reproductive and sexual dysfunctions	1

**Elective Courses**

14	URL 523 -PED	Advanced pediatric urology Course	1
15	URL 523 END	Advanced endourology Course	1
16	URL 523 ONC	Advanced Uro-oncology Course	1
17	URL 523 DYN	Advanced urodynamic course	1

	<b>CODE</b>	<b>CREDIT HOUR</b>	<b>COURSE</b>
1	URL-523-1	1	Trauma and urologic emergencies
	Trauma to the: kidney I, kidney II, bladder, ureter, urethra, genitalia.		

	<b>CODE</b>	<b>CREDIT HOUR</b>	<b>COURSE</b>
2	URL-523-2	1	Endourology and urolithiasis
	Epidemiology, Mineral metabolism, Pathophysiology I, Pathophysiology II. Medical evaluation I, Medical evaluation II. ESWL: Endo-urological treatment I, Endo-urological treatment II. Surgical treatment I, Surgical treatment II.		

	<b>CODE</b>	<b>CREDIT HOUR</b>	<b>COURSE</b>
3	URL-523-3	1	Voiding dysfunction and urodynamics
	Physiology & pharmacology of bladder & urethra, Pathophysiology & classification of voiding dysfunction, female urology and post prostatectomy incontinence.		

	<b>CODE</b>	<b>CREDIT HOUR</b>	<b>COURSE</b>
4	URL-523-4	1	BPH
	Epidemiology, aetiology, clinical evaluation, pathology, treatment I, treatment II.		

	<b>CODE</b>	<b>CREDIT HOUR</b>	<b>COURSE</b>
5	URL-523-5	1	Adrenal and renovascular hypertension
	Renovascular hypertension, renovascular surgery & interventional radiology.		

	<b>CODE</b>	<b>CREDIT HOUR</b>	<b>COURSE</b>
6	URL-523-6	1	Laparoscopy in urology
	Basic laparoscopy including anatomical background, physiologic and anesthetic considerations. Port ergonomics, techniques, indications and complications		

	<b>CODE</b>	<b>CREDIT HOUR</b>	<b>COURSE</b>
7	URL-523-7	1	Reconstructive surgery
	Basic reconstruction of the renal pelvis, urinary bladder, urethra and genitalia		

	<b>CODE</b>	<b>CREDIT HOUR</b>	<b>COURSE</b>
8	URL-523-8	1	Obstructive uropathy
	Extrinsic ureteric obstruction, Pathophysiology of upper & lower UT obstruction.		

	<b>CODE</b>	<b>CREDIT HOUR</b>	<b>COURSE</b>
9	URL-523-9	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 HOUR</b>	<b>COURSE</b>
10	URL-523-10	4	Urologic oncology
	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 HOUR</b>	<b>COURSE</b>
11	URL-523-11	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 HOUR</b>	<b>COURSE</b>
12	URL-523-12	2	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 HOUR</b>	<b>COURSE</b>
13	URL-523-13	1	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 HOUR</b>	<b>COURSE</b>
14	URL 523 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 HOUR</b>	<b>COURSE</b>
15	URL 523 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 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 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](#).

Content																				
	a1	a2	a3	a4	a5	b1	b2	b3	b4	C1	C2	C3	C4	C5	D1	D2	D3	D4	D5	D6
Trauma and urologic emergencies		x	x					x	x	x	x	x	x	x		x	x	x		
Endourology and urolithiasis	x	x	x	x			x	x	x		x	x	x	x			x	x		
Voiding dysfunction and urodynamics		x	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x		
BPH	x	x	x	x			x	x	x	x	x	x	x	x		x	x	x		
Adrenal and renovascular hypertension	x	x	x	x			x	x			x	x	x	x	x	x	x	x		
Laparoscopy in urology	x	x	x	x			x	x	x		x	x			x	x	x	x	x	x
Reconstructive surgery	x	x	x	x			x	x	x		x	x				x	x	x	x	x
Obstructive uropathy	x	x	x	x	x		x	x	x	x	x	x	x	x		x	x	x	x	x
Infection of the G.I.T		x	x	x	x	x	x	x	x		x	x	x	x	x	x	x	x	x	x
Urologic oncology	x	x	x	x	x	x	x	x		x	x	x	x	x		x	x	x		
Renal failure and renal transplantation	x	x	x				x	x	x		x	x	x	x	x	x	x	x		
Pediatric urology and congenital anomalies		x	x	x		x	x	x	x	x	x	x	x	x		x	x	x		
Reproductive and sexual dysfunctions	x	x	x	x		x	x	x	x	x	x	x			x	x	x	x		
Advanced pediatric urology Course		x	x	x		x	x	x		x	x	x	x	x	x	x	x	x		
Advanced endourology Course	x	x	x				x	x		x	x	x	x	x				x	x	x
Advanced Uro-oncology Course		x	x	x	x		x	x	x	x	x	x			x	x	x	x	x	x
Advanced urodynamic course	x	x	x	x	x	x	x	x			x	x					x	x	x	