



# **Academic Program and Course Description Guide**

**2025**

University Name: **Northern Technical University**

Faculty/Institute: **Al-Dour Technical Institute**

Scientific Department: **Immediate Ambulance**

Academic or Professional Program Name: **Technical Diploma in Immediate Ambulance**

Final Certificate Name: **Technical Diploma in Immediate Ambulance**

Academic System: **Course system**

Description Preparation Date: **1-7-2025**

File Completion Date: **30-7-2025**

Signature:



Head of Department Name:

**Dr. Abbas Hadi Hammadi**

Date:

Signature:



Scientific Associate Name:

**Prof. Dr. Hanan Shihab Ahmed**

Date:

The file is checked by:

**Department of Quality Assurance and University Performance**

**Director of the Quality Assurance and University Performance Department: Haider Ali Mohsen**

Date:

Signature:



**Approval of the Dean**

**Asst. Prof. Maha Al-Tayef Jassim**

1. Program vision
The Immediate Ambulance Department seeks to achieve excellence in education and scientific research, meet the requirements of society, and access the latest scientific and technical developments and apply them in a way that allows for the improvement of the quality of learning in all fields. The student is taught the basic theoretical information in the field of emergency and intensive care, and is trained on simulation dolls in the department as well as practically in operating rooms, recovery units, and intensive care units in hospitals to acquire the necessary skills and experience that qualify him to work in hospitals in the future as a paramedic.
2. Program message
Delivering the scientific material that the student must receive according to the instructions mentioned in the special skills clause in required educational outcomes and methods of teaching, learning and assessment.
3. Program Goals
The department aims to graduate technical nursing staff with a specialization in medical technical paramedic, who hold a diploma and are capable of providing immediate and first aid and nursing care to individuals in emergency and critical cases inside the immediate ambulance until they reach the hospital.
4. Program accreditation
nothing
5. External influences
The Iraqi Ministry of Health provides guaranteed training opportunities for students in the Emergency Medical Services Department at its headquarters, hospitals, and various health centers through diverse training programs tailored to the students' specializations. Emergency Medical Services graduates are given priority for employment at the ministry's various hospitals and health centers.

6. Program Structure				
Program Structure	Number of courses	Study unit	Percentage	Notes *
University Requirements	10	20	21.50	core courses 9 and 1 elective
Institute Requirements	5	14	15.05	core courses 5
Department Requirements	17	59	63.44	core courses 15 and electives 2
Summer training	<b>Completed</b>			essential
Other	<b>nothing</b>			

7. Program Description				
Year\Level	Code of the course	Name of the course		Approved hours
			theoretical	practical
<b>First Level</b>		Immediate Immbulance level1	28	16
<b>Second Level</b>		Immediate Immbulance level 2	30	19

8. Expected learning outcomes of the program
Knowledge
<p>1- Qualifying the student to apply knowledge in various cognitive fields in general and in the field of immediate first aid and emergencies in particular. Understanding human anatomy and organ functions (especially the heart, lungs, and nervous system). Knowledge of common diseases (stroke, diabetes, and epilepsy) and injuries (fractures, burns, and wounds). Understanding basic medications used in emergencies and their side effects.</p> <p>2- The student's knowledge of the principles and professional and ethical responsibilities of the field of specialization</p> <p>3- Enabling the student to provide first aid and nursing care to the individual in emergency and critical cases inside the immediate ambulance until he arrives at the hospital</p> <p>4-The student learns leadership skills, values of commitment, ethical behavior, and respect for others</p> <p>5- Knowledge of disaster and mass casualty response protocols.</p>

## Skills

1. **Basic Clinical Skills:** Systematically assess the patient's condition (health history, physical examination, vital signs). Perform CPR for adults and children. Treat head, spine, and chest injuries. Control bleeding and manage shock. Treat burns, fractures, and dislocations. Manage respiratory emergencies (asthma, choking).
2. **Medical Equipment Skills:** Use an electrocardiogram (ECG) and diagnose cardiac arrhythmias. Handle ventilators and oxygen. Use suction devices and emergency medications. Apply immobilization techniques (splints, neck collars).
3. **Communication and Decision-Making Skills:** Communicate effectively with patients, their families, and the healthcare team. Convey information clearly via radio or electronic systems. Make quick decisions under pressure based on protocols. Accurately document the case in the medical report.
4. **Field Skills and Incident Management:** Assess and secure the scene (such as traffic accidents). Organize the rescue chain in disasters. Handle psychological emergencies. Manage safe patient transport.
5. **Ethical and Professional Responsibility:** Adherence to confidentiality and safety standards. Working within the legal limits of emergency intervention. Maintaining personal and team safety. Participating in continuing medical education.

### Importance of Skilled Learning Outcomes:

1. **Directly Saving Lives:** By acquiring lifesaving skills such as controlling severe bleeding and stabilizing the spine after an accident. These are procedures that determine a patient's fate within the "golden minutes."
2. **Dealing with Unforeseen Real-Life Circumstances:** The field requires rapid assessment of the accident scene (e.g., chemical accidents/fires). Adapting to limited equipment or difficult conditions (crowding, darkness, weather).
3. **Building Professional Confidence:** Frequently practicing skills during critical situations.
4. **Effective Teamwork:** Clear communication skills within the team and the allocation of roles in disasters. This avoids errors and speeds up response.

### Skills learning outcomes be achieved?

1. **Progressive training (from easy to complex):** Basic stage: Practice isolated skills (e.g., blood pressure measurement, intramuscular injection) on medical models (simulation dummies). Then move to the advanced stage: integrate skills into integrated scenarios (e.g., dealing with an unconscious patient, difficulty breathing, or bleeding).
2. **Simulation-Based Training:** Use smart dummies that simulate bodily reactions (bleeding, sweating, changes in vital signs). Design emergency scenarios in realistic environments (miniature ambulances, pre-prepared disaster sites).
3. **Supervised Clinical Internships:** Partner with ambulance organizations and hospitals to apply skills under the supervision of field trainers. Start with simple tasks (assisting in transporting patients), then progress to critical tasks (participating in CPR).
4. **Deliberate Practice:** Repeating critical skills (e.g., inserting a breathing tube 100 times on a mannequin, correcting errors immediately). Using video recordings to analyze performance (e.g., why a student failed a particular task).

5. Immediate Feedback: Having a trainer correct errors during implementation. Group evaluation after each simulation session.
6. Technology Integration: Virtual Reality (VR) headsets to simulate rare situations (e.g., chemical explosions, rescue from heights). Apps that analyze skill performance (e.g., sensors on mannequins that show the depth/speed of compressions).

#### Defining Expected Learning Values Outcomes:

1. Compassion: Dealing with human suffering with dignity, regardless of the patient's social/cultural background.
2. Integrity: Honestly reporting errors, refusing bribes, and maintaining confidentiality.
3. Responsibility: Accepting the consequences of decisions under pressure and following up after the patient's discharge.
4. Justice: Providing fair service to all patients without discrimination (race, gender, or religion).
5. Psychological Resilience: Maintaining focus after traumatic scenes and managing fatigue.
6. Teamwork: Respecting team roles and providing assistance without obligation.

#### Values

- 1- Ability to manage medical work in the field of emergency aid
- 2- The ability to use immediate first aid equipment to meet the required needs within the field of specialization
- 3- Ability to work with the latest medical devices and medical diagnostic software
- 4-Teaching the student the ability to adapt to similar specialties ( X-ray devices, Sonar, human (medicine , medical devices ..... etc)

#### Defining the Expected Learning Values Outcomes:

- 1- Graduate Preparation: Ensuring graduates acquire the knowledge and skills necessary to succeed in their careers in emergency medical care.
- 2- Quality Measurement: Measuring the effectiveness of the educational process and identifying its strengths and weaknesses.
- 3- Planning: Planning educational activities, designing learning materials, and selecting appropriate teaching methods.

#### Examples of Expected Learning Values Outcomes:

1. In the area of emergency knowledge: Understanding the steps to deal with various injuries, infections, and disasters, and the procedures for dealing with them quickly and accurately according to safety standards.
2. In the area of emergency skills: The ability to use various medical devices for emergency situations, such as electrocardiograms, airway management, bone fracture immobilization, etc.
3. In the area of emergency situations: Prioritizing patients with critical and urgent conditions over patients with minor conditions, integrity in documenting medical reports, teamwork, and speed in rescuing patients while maintaining safety procedures.

## 9. Teaching and learning strategies

The instructor explains the theoretical material on the board using a slide projector, paper lectures, educational bags, and systematic and summer training in hospitals

## 10. Evaluation methods .

Daily, semester and final tests, weekly reports

## 11. Faculty members

Faculty members	Requirements/Special Skills	Specialization		Academic Degree
		private Scientific specialization	general Scientific specialization	
institution's staff		Inorganic Chemistry	Chemistry	Assistant Professor
institution's staff		Biochemistry	Chemistry	lecturer
institution's staff		Microbiology genetics	Life Sciences	lecturer
institution's staff		Microbiology	Life Sciences	Assistant lecturer
institution's staff		Finance	Accounting	Assistant lecturer
institution's staff		Marketing	Accounting	Assistant lecturer
institution's staff		Accounting	Accounting	Assistant lecturer
institution's staff		Accounting	Accounting	Assistant lecturer
Outside the institution's staff		Children	General medicine	Board
Outside the institution's staff		Microbiology	Life Sciences	Assistant lecturer
Outside the institution's staff		Microbiology	Life Sciences	Assistant lecturer

Outside the institution's staff		Fractions	General medicine	Board
Outside the institution's staff		Private international law	law	Assistant lecturer
Outside the institution's staff		Toxins and Pharmaceuticals	Veterinary medicine	Assistant lecturer
Outside the institution's staff		Nano technology	Life Science Education	Assistant professor

## Professional development

### Orientation of new faculty members

Training courses in the field of specialization  
Courses on how to publish scientific research

### Professional development for faculty members

Training courses in the field of specialization  
Developing scientific publishing skills

## 12. Acceptance standard

The admission criteria is through central admission within the plan of the Ministry of Higher Education and Scientific Research and according to the student's branch in school and his average.

## 13. The most important sources of information about the program

The textbook, auxiliary notebooks, external sources, Internet, scientific research and its latest developments

## 14. Program development plan

- 1-Developing the laboratories of the Immediate Ambulance department, as well as developing the curriculum by deleting, adding and replacing
2. Working on updating curricula to keep pace with the labor market
3. Participation in scientific workshops inside and outside Iraq
4. Hosting scientific competencies in the field of specialization

## Courses – First Level

Study plan for the first level for the academic year 2024-2025										
Immediate Ambulance Department - Level 1										
The symbol	Material type	Course material	The pavement if any	Number of units	Number of practical hours	Number of theoretical hours	Name of the material		Requirement type	Requirements
							In English	In Arabic		
NTU100	general	the first		2	-	2	Democracy and Human Rights	الديمقراطية وحقوق الانسان	compulsory	University requirements %22.7 10) units) 8 compulsory units 2 elective units
NTU101	assistant	the first		2	-	2	English language	اللغة الإنكليزية	compulsory	
NTU102	assistant	the first		2	1	1	Computer	الحاسوب	compulsory	
NTU103	assistant	the first		2	-	2	Arabic Language	اللغة العربية	compulsory	
NTU104	general	the second		2	1	1	Sport	الرياضة	Optional	
NTU105	general	the second		2	-	2	French Language	اللغة الفرنسية	Optional	
				10	2	10				the total
TIDO106	specialty	the first		4	2	2	Physiology	علم وظائف الاعضاء	compulsory	Institute Requirements %27.2 12) units) 12 compulsory 0 optional
TIDO107	specialty	the second		4	2	2	Anatomy	التشريح	compulsory	
TIDO108	assistant	the first		2	-	2	Safety of laboratories and workshops	سلامة المختبرات والورش	compulsory	
TIDO109	assistant	the second		2	-	2	Medical Terminologies	المصطلحات الطبية	compulsory	
				12	4	8				The total
IMA110	specialty	the first		4	2	2	Fundamental first aids	مبادئ الإسعافات الأولية	compulsory	Department requirements %50 Specialization requirements (20) 20 mandatory 4
IMA111	specialty	the first		4	2	2	Medical Surgical Nursing	التمريض الباطني	compulsory	
IMA112	specialty	the second		4	2	2	Fundamental of nursing	اساسيات التمريض	compulsory	
IMA113	specialty	the second		4	2	2	Clinical chemistry	الكيمياء السريرية	compulsory	
IMA114	specialty	the first		4	2	2	Microbiology	الاحياء المجهرية	compulsory	

IMA 115	assistant	the second	Only one course is selected.	2	-	2	Communication skills	مهارات التواصل	Optional	optional only 2 ) units are (selected
IMA 116	assistant	the second		2	-	2	Psychology	علم النفس	Optional	
				22	10	12				the total
				44				Total units for the first level		

## Courses – Second Level

Curriculum for the second level for the academic year 2024-2025										
Immediate Ambulance Department - Level 2										
The symbol	Material type	Course material	The institute if any	Number of units	Number of practical hours	Number of theoretical hours	Name of the material		Requirement type	Requirements
							In English	In Arabic		
NTU 201	assistant	The second		2	1	1	Computer	الحاسوب	compulsory	University requirements %17.02 (units 10) 10 mandatory units
NTU 202	assistant	The second		2	-	2	Arabic Language	اللغة العربية	compulsory	
NTU 203	assistant	the first		2	-	2	Crimes of Al-Baath regime	جرائم حزب البعث	compulsory	
NTU204	general	the first		2	-	2	Professional Ethics	اخلاقيات المهنة	compulsory	
				8	1	7				the total
TIDO 205	assistant	the first		2	-	2	Biostatic	الإحصاء الحياتي	compulsory	Institute Requirements %4.25 2 Units 2 Compulsory
				2		2				the total
IMA 206	specialty	the first		4	2	2	Emergency Nursing 1	تمريض الطوارئ 1	compulsory	Department requirements %78.72 Specialization requirements 34 (37) Compulsory 6 Elective (units 3) The student has the freedom to choose them for the
IMA 207	specialty	the first		4	2	2	Primary Health Care	الرعاية الصحية الأولية	compulsory	
IMA 208	specialty	The second		4	2	2	Emergency Nursing 2	تمريض طوارئ 2	compulsory	
IMA 209	specialty	the first		4	2	2	Pharmacology	علم الدوائيات	compulsory	
IMA 210	specialty	the first		4	2	2	Critical Nursing Cases	تمريض حالات حرجية	compulsory	
IMA 211	specialty	The second		4	2	2	Adult Nursing	تمريض بالغين	compulsory	
IMA 212	assistant	The second		2	-	2	Principles Of Professional Safety	مبادئ السلامة المهنية	compulsory	
IMA 213	specialty	The second		4	2	2	Toxins	علم السموم	compulsory	
IMA 214	assistant	the first		2	-	2	Nutrition and Diet Therapy	علم الغذاء والمعالجة الغذائية	compulsory	
IMA 215	assistant	the second		2	2	-	Research Proposal	مشروع التخرج	compulsory	

<b>IMA 216</b>	<b>assistant</b>	<b>The second</b>	<b>Only one course is selected.</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>Hematology</b>	<b>علم الدم</b>	<b>Optional</b>	<b>purpose of completing the graduation requirements</b>
<b>IMA 217</b>	<b>assistant</b>	<b>The second</b>		<b>3</b>	<b>2</b>	<b>1</b>	<b>epidemiology</b>	<b>علم الوبائيات</b>	<b>Optional</b>	
				37	18	19				the total
				47				Total units for the second level		

Curriculum Skills Chart																			
Please tick in the relevant boxes where individual Program Learning Outcomes are being assessed																			
Program Learning Outcomes																			
Year/ level	Course Code	Course Title	Core (C) Title or Option (O)	Knowledge and understandi ng				Subject- specifi c skills				Thinking Skills				General and Transferable Skills relevant to employability and personal development			
				A1	A2	A3	A4	B1	B 2	B 3	B 4	C1	C2	C 3	C4	D1	D2	D 3	D4
First	NTU100	Democracy and Rights	Fundamental	X				X				X				X			
	NTU101	English language	Fundamental	X				X				X				X			
	NTU 102	Computer	Fundamental	X				X				X				X			
	NTU 103	Arabic Language	Fundamental	X				X				X				X			
	NTU104	Sport	Accessory	X				X				X				X			
	TIDO 106	Physiology	Fundamental	X	X			X				X	X			X	X		
	TIDO 107	Anatomy	Fundamental	X				X				X				X			
	TIDO 108	Safety of laboratories and workshops	Fundamental	X				X				X				X			
	TIDO 109	medical terminologies	Fundamental	X				X				X				X			
	IMA 110	Principles Ambulance initial	Fundamental	X				X		X		X		X		X	X		
	IMA 111	Ambulance Initial and Emergency	Fundamental	X				X				X				X			
	IMA 112	Abdominal Nursing	Fundamental	X				X	X			X	X			X	X		
	IMA 113	Clinical chemistry	Fundamental	X				X				X				X			

	IMA 114	Microbiology	Fundamental	X				X				X				X	X		
	IMA 115	communication skills	Accessory																
	IMA 116	Professional behavior	Accessory	X				X				X				X			
Seco nd	NTU 200	English language	Fundamental	X				X				X				X			
	NTU 201	Computer	Fundamental	X				X				X				X			
	NTU 202	Arabic Language	Fundamental	X				X				X				X			
	NTU 203	Crimes of Al-Baath regime	Fundamental	X				X				X				X			
	NTU204	Professional Ethics	Fundamental	X				X				X				X			
	TIDO205	Biostatic	Fundamental	X				X				X				X			
	IMA 206	Emergency Nursing	Fundamental	X	X			X				X				X	X		
	IMA 207	Primary Health care	Fundamental	X	X			X				X				X	X		
	IMA208	Emergency Nursing	Fundamental	X	X			X				X				X	X		
	IMA 209	Pharmacology	Fundamental	X	X			X				X				X	X		
	IMA 210	Critical Cases Nursing	Fundamental	X	X			X				X				X			
	IMA 211	Adult Nursing	Fundamental	X	X			X				X				X			
	IMA 212	Principles Of Professional Safety	Fundamental	X				X				X				X			
	IMA 213	Toxins	Fundamental	X				X				X				X			
	IMA 214	Nutrition and Diet Therapy	Fundamental	X				X				X				X			
	IMA 215	Research Proposal	Fundamental	X				X				X				X			
	IMA 216	Hematology	Accessory	X				X				X				X	X		
	IMA 217	Blood Transfusion	Accessory																