

THE LIST OF RELEVANT AND CLOSELY RELEVANT MAJOR (PhD program)

Definitions:

- **Group 1:** Applicants with a Master's degree in a relevant field of the registered specialization.
- **Group 2:** Applicants with a Master's degree in a field closely related to the registered specialization (**must** take up complementary courses).
- **Group 3:** Applicants with a very good/good Bachelor's degree in a relevant field of the registered specialization (**must** take up complementary courses).

No.	Major	Group 1	Group 2	Group 3
1.	BUSINESS ADMINISTRATION (9340101)	<ul style="list-style-type: none"> □ Business Administration; □ E-commercial Business; 	<ul style="list-style-type: none"> – Finance and Banking; – Insurance; – Accounting; – Management Science; – Public Policy; – Public Administration; – Human Resource Management; – Management of Information Systems; – Science and Technology Management; – Safety Management and Occupational Health; – Economics <p>❖ Complementary courses: 9 credits</p> <ul style="list-style-type: none"> – Marketing Management – Human Resource Management – Marketing Research 	<p>❖ Complementary courses: 35 credits</p> <ul style="list-style-type: none"> – Marketing Management – Human Resource Management Marketing Research – Business Statistics – Business Research Methods – Strategic management – Leadership & Team Management – Advanced Organizational behavior – Strategic Human Resource Management – Advanced Consumer behavior – Research Methodology – Philosophy
2.	ACCOUNTING (9340301)	<ul style="list-style-type: none"> – Accounting; – Accounting – Auditing; – Or some master programs 	<ul style="list-style-type: none"> – Finance and Banking, Insurance, ... – Business Administration, Commercial Business, Management science, Public 	<ul style="list-style-type: none"> – Accounting; – Accounting – Auditing;

		<p>which are different name with accounting master program but it got less than 10% different curriculum of Accounting master program in TDTU.</p>	<p>Policy, Public Management, Human Resource Management, Information System Management, Management Science and Technology, Occupational Safety and Health Management,...</p> <ul style="list-style-type: none"> - Economics, International Economic Relations, - Or some master programs which are different name with accounting master program but it got from 10% to 40% different curriculum of Accounting master program in TDTU. <p>❖ Complementary courses: 9 credits</p> <ul style="list-style-type: none"> - Compulsory courses (6 credits) <ul style="list-style-type: none"> • Advanced Financial Accounting (3 credits) • Advanced Managerial Accounting (3 credits) - Selective courses (3 credits) <ul style="list-style-type: none"> • Advanced Auditing (3 credits) Accounting Information System (3 credits) 	<p>❖ Complementary courses: 30 credits</p> <ul style="list-style-type: none"> - Compulsory courses (16 credits) <ul style="list-style-type: none"> • Philosophy (3 credits) • Research Methods (2 credits) • Business Statistic (3 credits) • Accounting Theory (2 credits) • Advanced Financial Accounting (3 credits) • Advanced Managerial Accounting (3 credits) - Optional courses for orientation and research tools (4 credits) <ul style="list-style-type: none"> • Management Economic (2 credits) • Tools for processing and analyzing data (2 credits) • Law of Accounting & Auditing (2 credits) - Optional specialized courses (10 credits) <ul style="list-style-type: none"> • Advanced Auditing (3 credits) • International Finance (2 credits) • Project Management (2 credits) • International Accounting (3 credits) • Financial Management (3 credits) • Accounting Information System (3 credits) • Strategic Human Resource Management (3 credits) • Business Ethics (3 credits) • Research Methodology in Accounting (2 credits)
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4.	CIVIL ENGINEERING (9580201)	<ul style="list-style-type: none"> ☐ Civil Engineering (8580201); ☐ Hydraulic engineering construction (8580202); ☐ Marine Civil Engineering (8580203); ☐ Underground construction engineering (8580204); ☐ Transportation Engineering (8580205); ☐ Special Construction Engineering (8580206); ☐ Infrastructure Engineering (8580210); ☐ Geotechnical Engineering (8580211); ☐ Water resource Engineering (8580212); – Water supply and drainage engineering (8580213). 	<ul style="list-style-type: none"> – Construction economy (8580301); – Construction management (8580302); – Architecture (8580101); – Interior Architecture (8580103); – Regional and urban planning (8580105); – Urban and construction management (8580106); – Interior design (8580408) ☐ Urbanology (8580112). ❖ Complementary courses: 14 credits - Advanced structural mechanics (02 credits) - Finite Element Method (FEM) (03 credits) - Shell & plate structures (03 credits) - Advanced reinforced concrete structures (03 credits) – Advanced construction materials (03 credits) 	<ul style="list-style-type: none"> – Civil Engineering (8580201); – Hydraulic engineering construction (8580202); – Marine Civil Engineering (8580203); – Transportation Engineering (8580205); – Infrastructure Engineering (8580210); – Water resource Engineering (8580212); – Geotechnical Engineering (8580211); – Water supply and drainage engineering (8580213). ❖ Complementary courses: 14 credits Mandatory course (16 credits): - Advanced structural mechanics (02 credits) - Finite Element Method (FEM) (03 credits) - Shell & plate structures (03 credits) - Advanced reinforced concrete structures (03 credits) - Research methodology (02 credits) - Philosophy (03 credits) Selective courses (17credits): - Scheduling methods (03 credits) - Advanced construction materials (03 credits) - Construction project management (2 credits) - Pre-stressed concrete (2 credits) - Advanced foundation engineering (2

				<ul style="list-style-type: none"> credits) - Advanced steel structures (2 credits) - IT in Engineering Constructions (2 credits) - Solid & Hazardous Waste Management (2 credits) - Soil improvement and slope stability (2 credits) - Excavation and & Retaining walls (2 credits) - Project Appraisal and Analysis (2 credits) - Strategic Project Management (3 credits) - Construction risk management and business analysis (3 credits) - Research topic 1 (03 credits) - Research topic 2 (03 credits)
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<p>5.</p>	<p>ELECTRICAL ENGINEERING (9520201)</p>	<ul style="list-style-type: none"> – Electrical Engineering – Power System Engineering – Electrical & Electronics Engineering – Industrial Electrics – Refrigeration Electrical Engineering 	<ul style="list-style-type: none"> – Automation and Control Engineering – Automation Control – Electronics and Communication Engineering – Electronics and Communication Electronics Engineering – Electronics – Thermal mechanical – Manufacturing automation industry – Industrial informatics ❖ Complementary courses: – Intelligent Control (3 credits) – Power System Stability and Optimization (3 credits) – Automation Control for Motor Drives (3 credits) – Robotics (3 credits) – Renewable sources and applications (3 credits) – Advanced Wireless Communications (3 credits) – Wireless Networks (3 credits) – Statistical Signal Processing (3 credits) 	<ul style="list-style-type: none"> – Electrical Engineering ❖ Complementary courses: – Research Methodology – Philosophy – Intelligent Control – Power System Stability and Optimization – Electricity Market Structure and Operation – Advanced Power Electronics and Applications – Automation Control for Motor Drives – Renewable Sources and Applications – Advanced Power System Protection and Control – SCADA and Substation Automation – Smart Grid – Flexible AC Transmission and HVDC – Demand Side Management – Power Quality Management – Reliability Analysis and Risk – Management in Power Systems – Energy Management and Efficiency Analyzing and Managing Energy Projects – Power System Analysis – Advanced Topics in Modern Technology of Electrical Engineering Fields – Advanced Topics in Electric Safety and Reliability – Advanced Topics In Energy – Measurement and Supervisory – Advanced Topics In Energy Saving, Renewable and Green Energy Technology
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6.	COMPUTATIONAL SCIENCE (9460107)	<ul style="list-style-type: none"> – Computational Science – Computational Science and Engineering – Computational Engineering 	<ul style="list-style-type: none"> – Mathematics; – Probability Theory and Mathematical Statistics; – Mathematics for Informatics; – Applied Mathematics; – Mathematics - Informatics; – Statistical; – Algebra and number theory; – Computer Science; – Computer Networks and Data Communications; – Information System; – Cryptographic technique; – Computer Engineering; – Information Technology; – Information Technology Management; – Information System Management; – Mechanical Engineering; – Mechatronics Engineering; – Heat Engineering; – Mechanical Dynamics Engineering; – Aviation Engineering; – Marine engineering; – Automotive engineering; – Electrical Engineering; 	<ul style="list-style-type: none"> ❖ Complementary courses: 32 credits – Scientific computing environment – Scientific data visualization – Advanced matrix computation – Numerical methods for Partial Differential Equations – Numerical optimization – Introduction to Simulation - Computational Softwares – Fundamentals of Scientific computing – Programming methods – Applied computational Statistics and Data analysis – Methodology for scientific research – Philosophy

			<ul style="list-style-type: none"> – Electronic Engineering; – Telecommunications Engineering; – Control and Automation technology; – Chemical Engineering; – Material Engineering; – Environmental Engineering; – Physics Engineering; – Nuclear Engineering; – Geological engineering; – Geophysical Engineering; – Civil Engineering; – Civil Engineering of Hydraulic Construction; – Civil Engineering of Marine Construction; – Civil Engineering of Underground Construction; – Civil Engineering of Transportation Construction; – Civil Engineering of Special Construction; – Infrastructure Engineering; – Geotechnical construction; – Water Resources Engineering; – Water Supply and Drainage Engineering; – Other science and technology majors. <p>❖ Complementary courses: 15 credits</p>	
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