



Opportunities and Challenges of Establishing a University of Transport in Egypt

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Background on the Transportation Sector in Egypt

Egypt's transportation sector plays a vital role in connecting people, goods, and services across the country. However, there are significant gaps and challenges that need to be addressed.

Ministry of Transport Authorities (MOT)



Ministry of Transportation (MOT) : manages the transportation sector in Egypt through the above mentioned Authorities.

Total financial costs of Ministry of Transport projects 2014-2024



Some important Indicator figures

105.8

Billion
pound

Amount of investments executed in the transport sector 2020/2021 year.

184

Thousand
Kilometers

The amount of paved roads owned by GRABLT till 2020/2021 year.

1848

Bridges

The number of bridges owned by General authority for roads & bridges till 2019/2020 year

12 %

Trading
percent

Suez Canal is responsible for transporting this percentage from the total world trade.

Some important Indicator figures

145

Billion
pound

Cost of the Electrical high speed rail
(HSR) (Ain Sukhna – Administrative
capital – Alamin – Matrouh)

126

Ships

Total number of Ships of the national
merchant fleet till the year of 2020

Conclusion

The transportation sector
in Egypt is huge !!!!



Current Challenges for transport sector in Egypt

Lack of Specialized Programs and Education

The absence of comprehensive transportation-related programs hinders the development of a skilled workforce tailored to the sector's needs.

Insufficient Funding and Infrastructure

A lack of financial resources and proper infrastructure impedes the implementation of transportation-related projects and research initiatives.

Limited Research and Development Initiatives

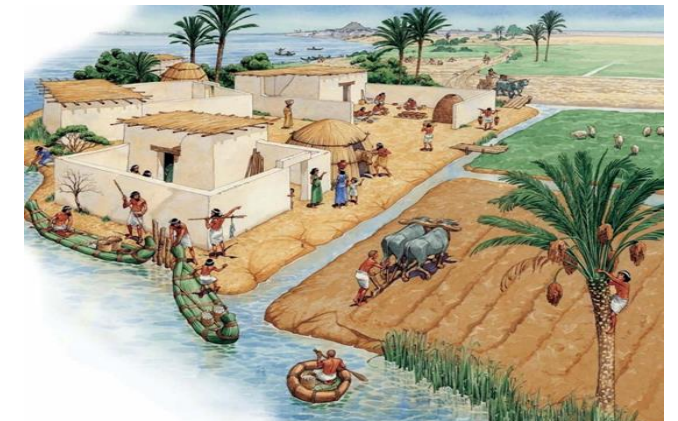
The shortage of research and development activities in the transportation field limits innovation and technological advancements.

Background on the Engineering education in Egypt

Egypt has many educational institutions that introduce engineering education. They are owned either by government or private sectors

Historical Engineering Marvels in Egypt

- Certainly, Egypt has a rich and illustrious history of engineering that spans **thousands of years**.
- It is very clear in the engineering design of the historical achievements in:
 - Pyramids of Giza
 - The Sphinx
 - Ancient Irrigation Systems
 - Temples and Tombs
 - The Aswan High Dam
 - Pioneering Engineering Techniques
 - Legacy in Mathematics and Astronomy
 - other



Statistics of public and Private Universities and Institutions in Egypt



27

Public Universities



47

Accredited Private universities



19

Egyptian National university



120

Accredited Private Institutions



18

Governorate Institutions

The number of Engineering educational institutions in Egypt that are certified by Engineer's syndicate

currently has reached:

- 97 institutions in total.
- Including 26 government engineering colleges.
- 71 private engineering colleges and institutes, expected to increase more.

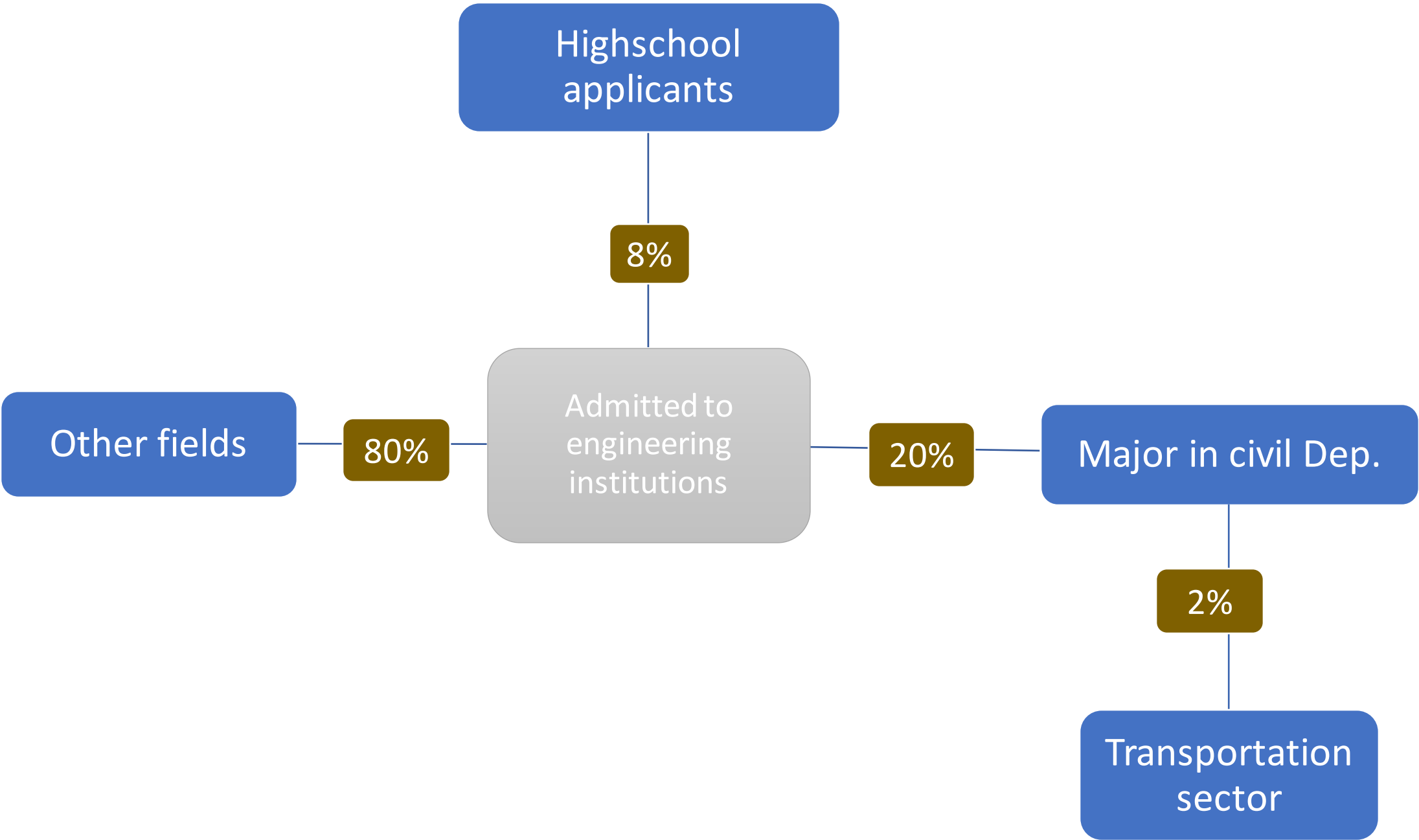
Statistics For Engineers Count

- The total number of students passing high school in the year 2022 is 649,387
- Admitted students for public engineering colleges in the same year was 15013
- The last estimated total graduates number in private & and public universities is about 42,000 to 45,000 graduates in 2022.

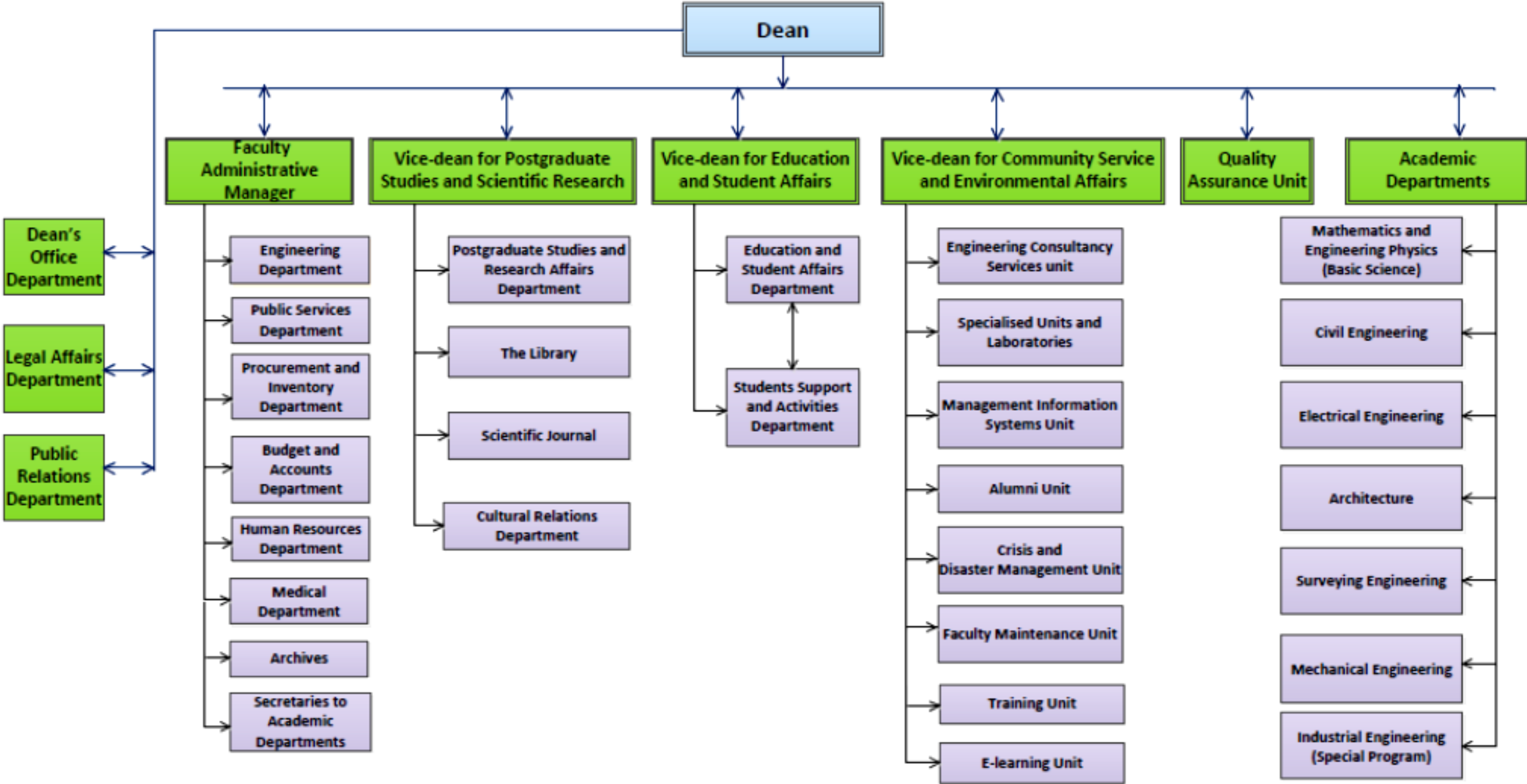
Which represents about 8% of total number from highschool stage each year

- 20% of engineering grads major in Civil department
- 2% of civil dep. Engineers specialize in the transportation sector.

Estimation of Specialized Engineers In the field of Transport



Typical organization structure for a faculty of engineering in Egypt.



Importance of Establishing a University of Transportation

A specialized university focusing on transportation can contribute to the development of advanced skills, innovative solutions, and sustainable practices in the sector. It can act as a catalyst for growth and modernization.

Importance of establishing a transport university in Egypt

- 1.Specialized Education:** It would provide specialized education and training in various transportation-related fields.
- 2.Economic Growth:** Transportation is a critical driver of economic growth.
- 3.Infrastructure Development:** It can contribute to the development and maintenance of transportation infrastructure.
- 4.Safety and Efficiency:** Transportation is closely linked to safety and efficiency.
- 5.Job Opportunities:** It can create new jobs inside and outside the university
- 6.Research and Innovation:** It will be a hub for research and innovation in the transportation field.
- 7.International Collaboration:** it will help in the knowledge exchange with international universities.
- 8.Addressing Transportation Challenges:** Egypt faces various transportation challenges,
- 9.Sustainable Development:** It can contribute to Egypt's goals of reducing environmental impacts.
- 10.Skills and Expertise:** The transportation sector requires diverse skills and expertise.

The way to the transport university

Government Support and Investment

The government's commitment to providing financial support and investing in education and research initiatives is crucial for the success of a university of transportation.

1

Collaboration with International Institutions

Partnering with renowned international institutions can bring expertise, knowledge exchange, and research collaboration opportunities to the university.

2

3

Establishing Specialized Programs

Crafting specialized programs tailored to the transportation sector's demands can ensure a skilled workforce and drive innovation in the industry.

Vision and Mission of the transport university

Vision

Vision aims to make Transport University a leading example for Egypt's and Middle Eastern universities in transport education, scientific research, and reaching international competition in transportation fields

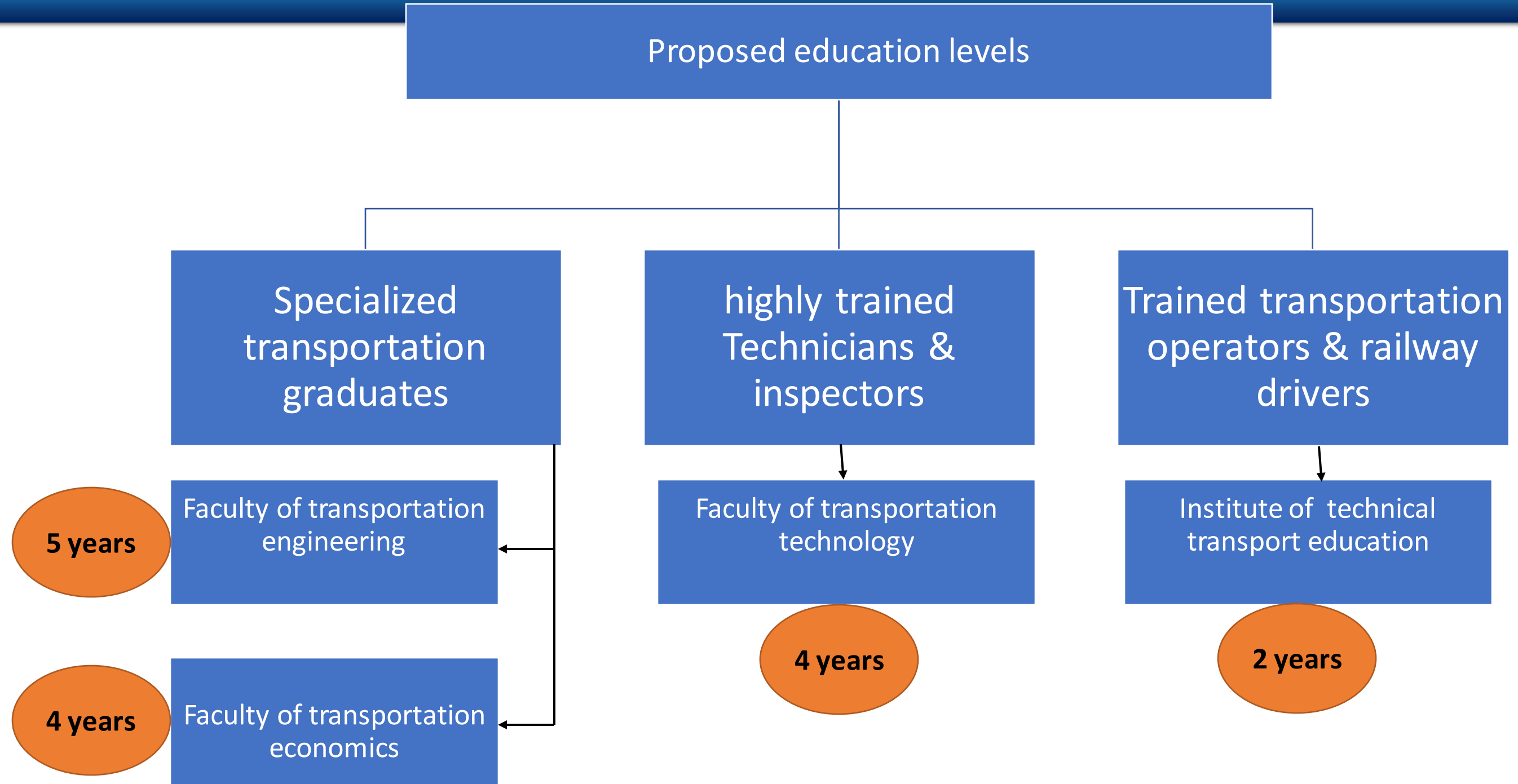
Mission

Transport University would have a role in developing the community by providing a stimulating environment for education and scientific research as well as providing distinguished educational service by equal opportunities for students and increasing the partnership with the local and regional community in a flexible framework allowing continuous improvement and maintaining the values and ethics of community keeping up with the scientific and technology development

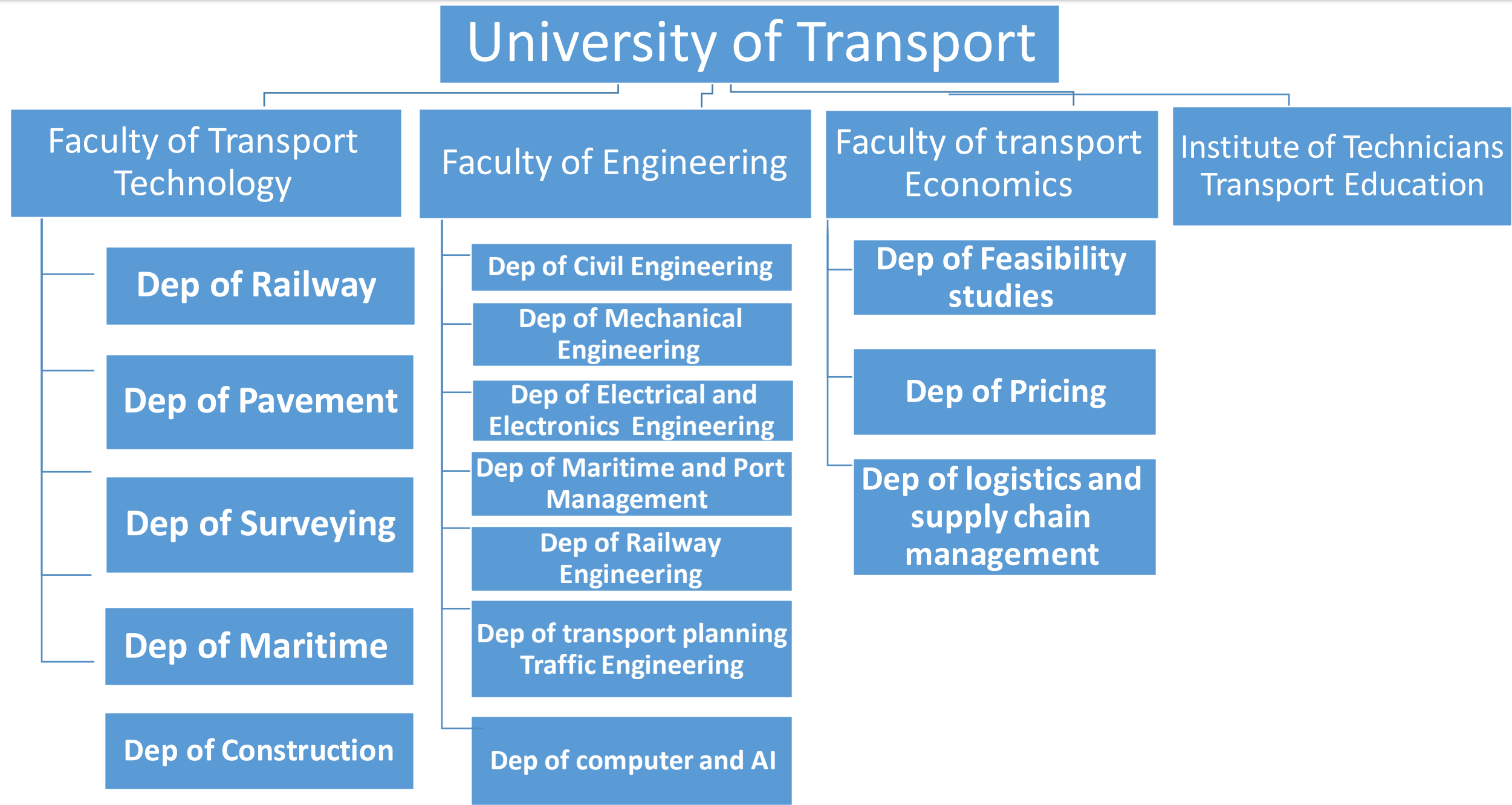
Goals of the transport university

- 1.Establishment of a World-Class Institution:** Create a university with a strong reputation for excellence in transportation education, research, and innovation.
- 2.Research Excellence:** Conduct research that leads to groundbreaking discoveries and practical applications in transportation and related fields.
- 3.Graduate Employability:** Ensure that graduates are highly employable in various sectors of the transportation industry, both nationally and internationally.
- 4.Global Recognition:** Gain international recognition as a leading institution in transportation education, research, and policy advocacy.
- 5.Sustainable Solutions:** Contribute to Egypt's sustainable development goals by researching and promoting sustainable transportation practices.
- 6.Transportation Safety:** Develop and promote safety measures that lead to a significant reduction in transportation accidents and fatalities.
- 7.Infrastructure Improvement:** Contribute to the modernization, expansion, and maintenance of transportation infrastructure within Egypt.
- 8.Policy Influence:** Actively participate in shaping transportation policies and regulations in Egypt and foster a favorable environment for the industry's growth.
- 9.Innovation Hub:** Become a hub for transportation-related innovation, startups, and entrepreneurship.
- 10.Community Impact:** Make a positive impact on the local community by addressing transportation challenges, improving mobility, and promoting public awareness of transportation issues.

Proposed levels of education in the transport university



University Structure



Challenges to transport university establishment

- 1.Funding and Resource Allocation:** Securing the necessary funding and resources for the university's infrastructure, faculty, and operational expenses can be a significant challenge.
- 2.Regulatory and Accreditation Requirements:** Meeting the regulatory and accreditation standards set by government bodies and accreditation agencies is a complex and time-consuming process.
- 3.University Recruitment and Retention:** Attracting and retaining qualified faculty members, especially those with expertise in transportation, logistics, and infrastructure, can be competitive.
- 4.Curriculum Development:** Developing a relevant and up-to-date curriculum that meets industry needs and keeps pace with technological advancements can be a challenge.
- 5.Infrastructure and Facilities:** Building or acquiring suitable infrastructure and facilities, including specialized laboratories and libraries, can be resource-intensive.
- 6.Lack of Awareness:** Raising awareness about the existence and importance of a Transport University, both among potential students

Challenges to transport university establishment

- 7. Industry Collaboration:** Establishing partnerships and collaborations with transportation and logistics companies and agencies may require overcoming resistance or skepticism.
- 8. Quality Control:** Ensuring high-quality education, research, and industry engagement is vital but can be challenging to maintain consistently.
- 9. Student Enrollment:** Attracting and retaining students, especially in specialized fields, can be a challenge due to competition with other established universities.
- 10. Market Demand:** Ensuring that the university's programs align with market demand for graduates in transportation-related fields can be complex and requires ongoing evaluation.
- 11. Global Recognition:** Gaining international recognition and establishing exchange programs or partnerships with foreign universities may take time and effort.
- 12. Cultural and Social Factors:** Adapting to and respecting cultural norms and expectations related to education in Egypt is essential for the university's success.

Proposed collaboration form with KUNT

Proposed collaboration form with KNUT

Transport university strategy tasks	KNUT	Egyptian Experts	TPA	Approval
University name and location	✓	✓	✓	TPA/MOT
University goals	✓	✓	✓	TPA/MOT
Founders' names, nationalities, and data (CV)	✓	✓	✓	TPA/MOT
University required resources	✓	✓		TPA/MOT
The university's location, and the stages of construction.		✓	✓	TPA/MOT
Capital cost distribution between founders		✓	✓	TPA/MOT
Draft internal regulations of the university.	✓	✓		TPA/MOT
University of transport structure	✓	✓	✓	TPA/MOT
Formation of the University Council and its committees and their terms of reference.	✓	✓		TPA/MOT
Admission requirements.	✓	✓		TPA/MOT
General rules for discounted or free scholarships for Egyptian students	✓	✓		TPA/MOT
Scientific certificates granted by the university, curricula and examination systems.	✓	✓		TPA/MOT
Detailed curriculum and course contents	✓	✓		TPA/MOT
The university's plan in the field of appointing faculty members and the supporting staff	✓	✓		TPA/MOT
Cooperation plans with Egyptian, foreign, and Arab universities	✓	✓	✓	TPA/MOT
Proposed start date for the study.		✓	✓	TPA/MOT
Training programs for the Egyptian teaching staff	✓	✓		TPA/MOT



Thank you for your attention