

AMERICAN INTERNATIONAL UNIVERSITY-BANGLADESH

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Assignment Cover Sheet

Assignment Title:	Home Assignment -1			
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Course Title:	Home Assignment-1			
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Group Name/No.:

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Faculty use only		
FACULTY COMMENTS	Marks Obtained	
	Total Marks	

Home Assignment

Lesson-1 INTRODUCTION TO THE ENGINEERING ETHICS

1. What is learning outcome in terms of attainment?

Ans:

A learning outcome in terms of attainment refers to the specific knowledge, skills, or abilities that a student is expected to have acquired at the end of a learning experience or program. It defines the expected level of mastery or proficiency that the student should have achieved in relation to the learning objectives or goals. It provides a measure of the student's performance or progress towards attaining the intended educational outcomes

2 . Write down the twelve graduate attributes?

Ans:

1. Knowledge
2. Problem Analysis
3. Design/development of Solutions
4. Investigation
5. Tool Usage
6. The Engineer and Society
7. Human, Social, Economic and Environmental impacts
8. Ethics
9. Individual and Collaborative Team work
10. Communication
11. Project Management and Finance
12. Continual Life-long Learning

3. Why An Engineer who is Righteous, Conscientious, and Virtuous is successful in his professional career?

Ans:

An engineer who is righteous, conscientious, and virtuous is likely to be successful in their professional career for several reasons:

Professionalism: By upholding high moral standards, a virtuous engineer is more likely to act in a professional manner, demonstrating integrity and a commitment

to ethical conduct.

Trust and respect: By demonstrating honesty, responsibility, and accountability, a virtuous engineer will gain the trust and respect of colleagues, clients, and stakeholders, which can lead to more opportunities and better working relationships.

Reputation: A virtuous engineer will build a positive reputation as a trustworthy and responsible professional, making them more appealing to potential employers and clients.

Innovation: A virtuous engineer is likely to be more creative and innovative in their problem-solving approach, as they will approach their work with a commitment to doing what is right and in the best interest of their clients and stakeholders.

Career satisfaction: A virtuous engineer is more likely to feel a sense of personal satisfaction and fulfillment in their career, as they are able to balance their professional responsibilities with their personal values and beliefs.

In summary, a virtuous engineer who demonstrates righteousness, conscientiousness, and virtuousness is more likely to be successful in their professional career due to their ability to build trust, respect, and a positive reputation, as well as their commitment to ethical and innovative solutions.

4. Why and how do you explain your professional practice as engineering practice?

Ans:

Professional practice in engineering refers to the ethical, competent, and responsible application of scientific, mathematical, and engineering principles to design, develop, and implement solutions to real-world problems.

Ethical conduct: Engineers have a responsibility to act in an ethical and responsible manner, following codes of ethics and professional standards, and considering the impact of their work on society and the environment.

Competency: Engineers must maintain their technical competency and continue

to learn and develop their skills throughout their careers.

Problem solving: Engineers must approach problem-solving in a systematic, analytical, and creative manner, considering the constraints and requirements of each situation.

Collaboration: Engineers often work in teams, and must be able to effectively communicate and collaborate with others to achieve common goals.

Responsibility: Engineers must take responsibility for their work and ensure that their designs and implementations meet all relevant standards, regulations, and safety requirements.

In summary, professional practice in engineering is the responsible and ethical application of scientific and engineering principles to design and develop solutions that meet the needs of society while considering the impact of those solutions.

5. How ethics is derived and what is the meaning of ethics and write the sources of ethics?

Ans:

Ethics is derived from the Greek word "ethos," which refers to a moral code or system of values. Ethics is the branch of philosophy that studies the principles and values that govern human behavior, especially in regards to moral obligations and duties.

The meaning of ethics is the study of what is right and wrong, good and bad, in human conduct. It deals with questions about what is morally right or wrong, and how individuals and society should act in order to promote good and avoid evil.

The sources of ethics include:

Moral Philosophy: Ethics is primarily derived from philosophical inquiry and debate, with different philosophical schools of thought offering different ethical theories and principles.

Religion: Many religious traditions have established codes of ethics and moral guidelines that shape the behavior of individuals and communities.

Law: The legal system sets standards for ethical behavior through laws and regulations, and provides a framework for resolving disputes and enforcing ethical obligations.

Professional Codes: Many professions, including engineering, have established codes of ethics that set standards for professional behavior and guide decision-making in specific fields.

Personal Experience: An individual's personal experiences and values can also shape their ethical beliefs and inform their moral decision-making.

In summary, ethics is a branch of philosophy that deals with questions about what is right and wrong, good and bad, in human conduct. The sources of ethics include moral philosophy, religion, law, professional codes, and personal experience.

6. What is engineering ethics and how the engineering societies provide the responsibilities of engineers depicted in code of conduct in broad areas of eight groups?

Ans:

Engineering ethics is the branch of ethics concerned with the ethical and moral obligations of engineers in their professional practice. It involves the application of moral principles and values to the design, development, and implementation of engineering solutions and technologies.

Engineering societies play a crucial role in establishing and promoting ethical standards for engineers. Many engineering societies have developed codes of ethics that outline the responsibilities of engineers in various areas of practice. These codes typically cover the following broad areas:

Public safety: Engineers must prioritize the safety and well-being of the public in all aspects of their work.

Professional competence: Engineers must maintain their technical competence and continue to learn and develop their skills throughout their careers.

Honesty and integrity: Engineers must act with honesty and integrity, avoiding conflicts of interest and promoting transparency in their work.

Confidentiality: Engineers must maintain the confidentiality of sensitive information and not disclose confidential information without proper authorization.

Environmental responsibility: Engineers must consider the impact of their work on the environment and take steps to minimize negative impacts.

Social responsibility: Engineers must consider the social and cultural implications of their work and act in a way that promotes the greater good.

Fair treatment of others: Engineers must treat all parties involved in their work fairly and avoid discrimination.

Responsibility to clients: Engineers must act in the best interest of their clients, providing accurate and reliable information and fulfilling their obligations.

In summary, engineering ethics is the branch of ethics concerned with the ethical and moral obligations of engineers in their professional practice. Engineering societies play a crucial role in establishing and promoting ethical standards for engineers through codes of ethics that cover areas such as public safety, professional competence, honesty and integrity, confidentiality, environmental responsibility, social responsibility, fair treatment of others, and responsibility to clients.

Note: To be submitted in the next class