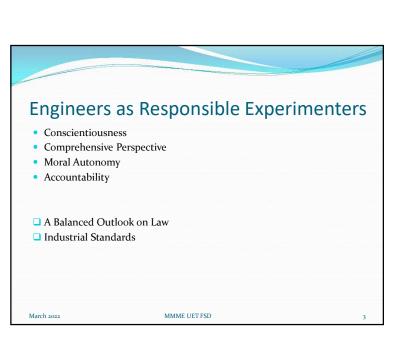
# Social and Ethical Aspects in Engineering IME-251 Engr. Dilruba Siddiqi



# Week10 Agenda • Engineering as Social Experimentation • Socially conscious engineering; Engineering, Ecology and Economics March 2022 MMME UET FSD 2

### **Engineers as Responsible Experimenters** Important Words: Conscientiousness Bureaucracy • A primary obligation to protect the safety of human subjects • Prudent and respect their right of consent. · Aspiration • Commitment to sensitivity to full range of moral values. Conceive · Commitment to responsibilities relevant to a given situation. · Paramount Adherence · Willingness to develop the skill and expend the efforts\* Paternalistically needed to reach a reasonable balance among the considerations at hand. · Conscientiousness means consciousness : Open eyes, open ears and an open mind. · Conscientiousness will never be disregarded in the quest of new knowledge, the rush for profits, a narrow adherence to rules, or a concern over benefits that harms the few. MMME UET FSD March 2022

## **Engineers as Responsible Experimenters** Important Words: Comprehensive Perspective Potent • A constant awareness of the experimental nature of any. Hallucinogen project, imaginative forecasting of its possible side effects. Blur and a reasonable effort to monitor them. Obsolescence · Conscientiousness is blind without relevant factual · Hinder information. · Acquire • Don't lose perspective by just lack of moral concern or by• Imaginatively putting burden on someone else. Foresee · Anticipate · Preventive Technologies MMME UET FSD March 202

### **Engineers as Responsible Experimenters** Important Words: Accountability Culpable • Accepting accountability for the results of a project. Blameworthy · Stanley Milgram's experiment: an astonishing example of. Disposition Scrutiny · Milgram explained these results by citing a strong Psychological Cogent tendency to abandon personal accountability when placed under\* Submit · Fragmentation of large-scale engineering projects lessens · Ruse the sense of personal accountability. Deception · Fragmentation of work delimit or diffuse areas of personal · Astounding accountability. Pressure to move on a new project promotes a sense of being Strapped accountable only for meeting schedules. · Writhing · Contagion of malpractice suits currently afflicting the · Apparent medical profession is carrying into engineering. Agony Ascribe Legitimate MMMF LIFT FSD March 2022 Divest

## **Engineers as Responsible Experimenters** Important Words: Moral Autonomy Forfeited • Autonomous, personal involvement in all steps of a project. • Sophisticated • Kent's authenticity: Moral beliefs and attitudes should be • Adequacy held on the basis of critical reflection rather than passive. adoption of the particular conventions of one's society or. Latitude profession. Conglomerate • Tendency and Sense of autonomous participation in one's • Retention · It would be in long term interest of big firms that their management play a decisive role in moral autonomy of firm's engineers. MMME UET FSD March 2022

## Engineers as Responsible Experimenters • A Balanced Outlook on Law • Updating the laws and regulations • Danger of overburdening the rules and the regulators • Industrial Standards • ISO Standards • March 2022 MMME UET FSD Emportant Words: • Schism • Wary • Deregulate • Ought to • Compliance • Void

