

Representative Research Work by EM Students

Ms. Maysaa Jaafar will talk about: pricing and inventory decisions of a product under logit demand. On the supply side, we adopt the framework of the Economic Ordering Quantity (EOQ) model. Our analysis proceeds sequentially for a given price, we determine the optimal order quantity that maximizes the profit. We then analyze the resulting corresponding profit at this optimal inventory level, as a function of the price. Results include developing simple bounds on the optimal price, and establishing that the profit function is unimodal (pseudo-concave) over the range defined by these bounds. Post-optimality analysis includes comparative statics results that analytically establish the monotonicity of the optimal price in several of the model parameters (such as the unit holding cost and fixed holding cost).

Mr. Adnan El Tannir will provide: an overview of Human Computer Interactions and Human Factors and Ergonomics, followed by an introduction to the ergonomic benefits of low cost interventions at the operating room to create a safer work environment for nurses.