Talk Title: *Ethics Courses for IT students: Why is it crucial in the era of millennials and technology immersion?*

*Speaker:*  
**Dr. Zeenath Reza Khan,**  
University of Wollongong in Dubai

**Abstract:** Phillip Budeikin, a millennial, created the social media game Blue Whale which encourages children to commit suicide after attempting a range of harmful challenges. When arrested, Budeikin said he was cleansing the society of ‘biological waste’ (Mann, 2017). Forty percent of millennials today consider Facebook CEO Mark Zuckerberg a role model (Ray, 2017), who on numerous occasions has said ‘you can be unethical and still be legal; that’s the way I live my life’ (Call, 2017). In June of 2011, Google introduced addictive Les Paul doodle that allowed users to strum away at strings that replicated Les Paul’s Gibson Guitar, only to have 5.3 million hours of estimated time spent by viewers playing this game (RescueTime, 2011) which according to Arvind Narayanan and Shannon Vallor equated to eight lifetimes (Narayanan & Vallor, 2014). Millennials behind the doodle initiative such as Ryan Germick stated that they didn’t ‘have much time for boring stuff like rules… [that they] don’t use handbooks or focus groups’ (Day, 2014). All three cases mentioned above have two things in common – millennials and technology. The same millennials who make up the most-educated generation bracket in history, who have displayed flagrant need for connectivity and information sharing little regards for privacy and who have exhibited insatiable thirst and interest in technology and the digital space. While students in nursing, law, auditing and such have well developed codes of professional ethics they are expected to follow as part of their profession, software engineers, digital content developers, and such are faced with ethical dilemmas that are surprisingly not addressed or highlighted often (Narayanan & Vallor, 2014). The Fourth Industrial Revolution is here, infusing and integrating technology into and between physical, digital and biological world (Schwab, 2016). The speed of infiltration and expectation of technological evolution has made the software life-cycle obscure, not requiring engineers to follow through all steps of development, minimizing importance of customer analysis, impact and feedback and ultimately deploying programs to the customers directly (Narayanan & Vallor, 2014). What does this mean? In case of victims of Blue Whale game, it means an imminent death. For Facebook users, unequivocal need for narcissistic pleasure, self-adulation and connectivity. And for Google’s Doodle users, simply stick fingers, sore eyes and an addiction that jumps from one app to the next, looking for the next hit of adrenaline and dopamine to keep the ‘high’ going. But do Google’s Doodlers or Facebook CEO or Blue Whale game creator have an obligation to consider such negative consequences to their innovations? What are the principles or codes of conduct that should be guiding their developmental needs and behaviours? With frequent reports of irresponsible decision-making in the technology world creating waves of devastation from financial to political and social fronts, it is critical that higher education institutions engage more millennials in dialogue to discuss and develop understanding of responsible software engineering to promote ethical practices in the real world. So,
how do we go forward? What is the answer to this dilemma? Are these real ethical issues in the digital space? This invited talk sifts through the sands of ethical dilemmas faced by millennials around the world and their consequences while making a case for the need to embed good ethical values and habits in students when developing applications or creating content in the digital space to ensure public good is paramount to any innovation that hits the market, based on insights from the impact of teaching such a subject at University of Wollongong in Dubai.

**Biography:** Dr Zeenath Reza Khan is an Assistant Professor. She has been teaching in the Faculty of Engineering and Information Sciences at University of Wollongong since 2001. She completed her PhD under full fee-waiver scholarship from University of Wollongong in Ethics and E-cheating among Students which was nominated for the Emerald Outstanding Doctoral Thesis Award 2016. Dr Khan’s research interests are in community informatics, ethics in IT, teaching and learning, and STEM for girls and has been nominated thrice for the Research Excellence Award by UOWD’s Research Committee. She is the winner of UOWD Teaching Excellence, BE Excellence in Teaching by Bangladesh Consulate in Dubai, Sony Gulf Federal Environment Award, and Turnitin Global Innovation Awards: Africa and Middle East Region – Academic Integrity Category and recently Wollongong VC Award for Outstanding Contribution to Teaching and Learning 2016. She is currently a Fellow of Wollongong Academy of Tertiary Teaching Excellence (WATTLE). In her spare time, she has been an active mentor for several graduation projects for MIC and CS students and has been involved in successful projects such as My Bei't, Hereos App, TextMatch, Ta'aleem, Sa’ma and iRecall all of which have been accumulating accolades. She is the founding chairperson of National Mathalon Competition, Teacher’s Forum: Math Bloc, Envirotalk Youth Earth Summit, Women in Educational Leadership Summit, Tech-G STEAM Camp for Girls and so much more. Dr. Khan has to-date five book chapters, 10 journal articles, and 23 conference papers to her name. She chaired the ranked International Conference on Academic Integrity and authoring the upcoming book Exploring Emerging Academic Integrity Issues in the Middle East.