

## **Certification Course in “System Dynamics”**

Amity Business School, Amity University, Noida conducted System Dynamics Certification Course spanning 15 sessions (30 hours **System Dynamics**) in virtual mode on Zoom platform. The MS Teams Platform was used to upload and share the class material. The course began on 19<sup>th</sup> Sept, 2020 and concluded on 12<sup>th</sup> November, 2020 attended by 18 participants. System Dynamics Course was run for MBA Students by Prof. P. Raghavendran who is a Master in Management (S.M.) from Sloan School of Management, MIT, USA and who has an industry experience of over 50 years in the oil industry.

System dynamics (SD) is an approach to understanding the nonlinear behaviour of complex systems over time using stocks, flows, internal feedback loops, table functions and time delays. System dynamics is a methodology and modelling technique to frame, understand and discuss complex issues and problems. Originally developed in the 1950s to help corporate managers improve their understanding of industrial processes, SD is currently being used throughout the public and private sector for policy analysis and design. The course was initiated with an introduction to feedback loops and creating these loops based on real life problems, with special reference to COVID-19. As the course progressed, Prof. Raghavendran taught models on MS Excel, through an interesting Beer Game, feedback loops, time delays, stocks & flows and table functions. The same enabled students to make and understand complex models with ease. Students also learnt to work on Vensim Software. The models made on Vensim were based on various simulations and helped in choosing the best out of all solutions. Activities were conducted in all sessions in the form of breakout sessions on Zoom platform. The groups made in these breakout sessions submitted their assignments as per the deadlines. Post submissions, Prof. Raghavendran gave feedback on the same and discussed them in depth in to clear doubts and for better understanding of the concepts of system dynamics.

The learnings which students gathered from this course through the activities performed and the games played in the breakout sessions has helped immensely in analysing systems around us. The 15 sessions were carefully filled with team activities that helped gather learnings of managing complex real-life situations with systematic thinking, analysing and solving them with ease.

Dr. Rushina Singhi, Dr. Teena Bagga and Ms. Swati Bhatnagar were the Faculty Coordinators from ABS.