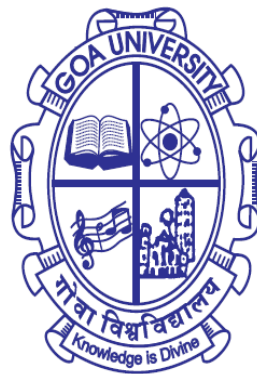




**Department of Commerce
Goa University**

**Workshop on
Structural Equation Modeling (SEM) and
Social Network Analysis (SNA)**



January 27-31, 2019

Department of Commerce, Goa University is organising **five (5) days' workshop** on (1) Structural Equation Modeling (**SEM**) and (2) Social Network Analysis (**SNA**) from **January 27th to 31st 2019**. The workshop will be conducted by **Professor Israr Qureshi**, Professor at Research School of Management, Australian National University. He is currently involved in multiple research projects that investigate various aspects of social value creation through sustainable development, social entrepreneurship, and ICT. Prof. Israr is also engaged in various initiatives to address climate change. Prof. Israr uses both qualitative and quantitative approaches, and his research has been published in Academy of Management Learning and Education, European Journal of Information Systems, Journal of Business Ethics, Journal of Experimental Social Psychology, Journal of Management, Journal of Management Studies, Journal of Organization Behavior, MIS Quarterly, Organizational Research Methods, Organization Studies, among others.

Registration and Selection:

The Workshop is open for Research Scholars pursuing Ph. D. and Faculty members from all disciplines. A batch of 60 participants would be selected after screening of their applications. Applicants are requested to submit their details in the prescribed format with a brief write-up about their research topic by clicking on the following link:

<https://goo.gl/forms/p6Cyab3DKLLhWyvN2> .

Participants should have an understanding of the following techniques:

For Structural Equation Modeling (SEM):

- Multiple Regression,
- ANOVA, and
- Factor Analysis.

For Social Network Analysis (SNA):

- The Basic idea of OLS (especially assumption of independence of observations),
- The Idea about relational data, and
- Intention to use SNA in their research.

Since the session timings are from 08.30 am till 05.00 pm, the Workshop is having a **mandatory residential condition from 27th till 31st January 2019**. Selected participants are required to pay their Registration fee of Rs. 10,000 (Rupees Ten Thousand only) which includes four days' accommodation (on twin sharing basis), breakfast, working lunch, evening tea, and study materials (soft copies). The details about making registration fee payment will be informed to the selected candidates by 10th December 2018. The selected participants are required to be present at the venue 30 minutes before the commencement of the sessions on all four days. Certificate of completion may not be issued to those who fail to comply with the attendance conditions.

Workshop on Structural Equations Modelling

This Workshop is intended to provide participants with the advanced knowledge and skills needed to use Covariance-Based Structural Equations Modeling (CBSEM) to test substantive theoretical questions. Basic knowledge of CBSEM will be covered in the first three sessions. The fourth session will deal with some advanced techniques. The focus will be on conceptual as well as practical aspects of correctly analysing and interpreting group comparisons, complex moderated-mediation and mediated moderation models, latent growth models, and growth mixture models. The Workshop draws on measurement theory, construct validity, and the logic of theory testing to assess the quality of research using CBSEM. We will use AMOS software to demonstrate most of the techniques (we may use Mplus for some of the very advanced models).

Objectives:

The primary objectives of the workshop are as follows:

- a) Impart participants with advanced concepts of CBSEM
- b) Advance participants' understanding of theory building through CBSEM,
- c) Develop participants' knowledge; framework and analysis skills to establish them as a management scientist, and impart the ability to evaluate CBSEM based empirical research critically.
- d) Building confidence and capability in participants to apply various advanced CBSEM analysis techniques and tools
- e) Exposing participants to the use of AMOS/ Mplus for testing various advanced CBSEM models

Tentative Session Plan:

Jan 28, 2019 – Session 1 (8:30 – 11:00am)

Foundations of Structural Equations Modelling: Framework for theory construction; Basic concepts of multiple regression and SEM; Introduction to Structural Equations Models; Specification and identification of Path Models; Various issues related to Path Models: Multiple DVs, correlations amongst IVs, other statistical issues.

Jan 28, 2019 – Session 2 (2:30 – 5:00pm)

Specification and Identification of Confirmatory Factor Analysis Models; Models with Unobserved Variables: Measurement model and Structural model related issues; Important Guidelines for Model Estimation: Model fit, model selection, nested models, convergent validity, AVE, discriminant validity, common method variance, missing data, outliers.

Jan 29, 2019 – Session 3 (8:30 – 11:00am)

Important Guidelines for Result Reporting: what to report in which section; justification for model selection, estimation, and results interpretation; research ethics regarding data collection and analysis; response to reviewers regarding SEM.

Jan 29, 2019 – Session 4 (2:30 – 5:00pm)

Advanced SEM topics: Mediation, Moderation, Moderated-Mediation & Mediated-Moderation: Conceptual framework; Latent Growth Curve Modeling: Conceptual framework; Latent Class Analysis and Growth Mixture Models: Conceptual framework.

Workshop on Social Network Analysis

Social Network Analysis is increasingly being used across various disciplines such as organisational studies, management, business, sociology, political science, communications, physics, computational biology, medical chemistry etc. Quantitative empirical studies that analyses social, management, and business phenomena, formulate hypotheses, and test them through social network analysis are increasing in social sciences including management and organisation research. In this workshop, we will learn how to apply social network analysis to test various theories. This workshop is geared towards providing expertise in social network methodologies that cover data collection, research ethics, and data analysis, through hands-on practice on UCINET software.

Objectives:

The primary objectives of the workshop are as follows:

- a) Impart participants basic and advanced concepts of Social Network Analysis (SNA).
- b) Advance participants' understanding about testing theories using SNA.
- c) Develop participants' knowledge framework and analysis skills to establish them as a management scientist, and impart the ability to evaluate SNA based empirical research critically.
- d) Build confidence and capability in participants to apply various SNA techniques and tools.
- e) Expose participants to the use of UCINET for testing various Social Network models.

Tentative Session Plan:

Jan 30, 2019 – Session 1 (8:30 – 11:00am)

Foundations of Social Network Analysis: What are networks? Types of relations; relations and attributes; goals of analysis; fundamental concepts in network analysis; distinctive features of network measurements. Network variables as explanatory variables; network variables as outcome variables; directed vs undirected networks. **Research design:** experiments and field study; whole network and personal network research design; source of network data; types of nodes; type of ties; actor attributes

Jan 30, 2019 – Session 1 (2:30 – 5.00am)

Network data through a questionnaire: Network questions; question formats; respondent burden; archival data collection; data from electronic sources. Network data collection: sociometric method; egocentric method; roster method; snowballing method; boundary specification and sampling; strategies for finding group boundaries; data management/ data entry; data fusion/ aggregation; errors in a secondary source. **Ethical considerations:** issues related to egocentric, whole networks, and other designs; anonymity and confidentiality; non-respondents; informed consent; duty of care; feedback to participants – individual debriefing, group feedback

Jan 31, 2019 – Session 3 (8:30 – 11:00am)

Data management: data import; matrix formats; list format; edgelists; cleaning network data; data transformation; transposing; symmetrising; dichotomising; combining relations; combining nodes. **UCINET software use:** basic UCINET features, demonstration of data management and descriptive analysis; normalisation; matching attributes and networks Converting attribute to the matrix; data export

Jan 31, 2019 – Session 4 (2:30 – 5:00pm)

Testing hypotheses: permutation tests; dyadic hypotheses – QAP regression, mixed dyadic-node hypotheses, continuous attributes, categorical attributes. Whole network hypotheses, main-effects, interaction effects.

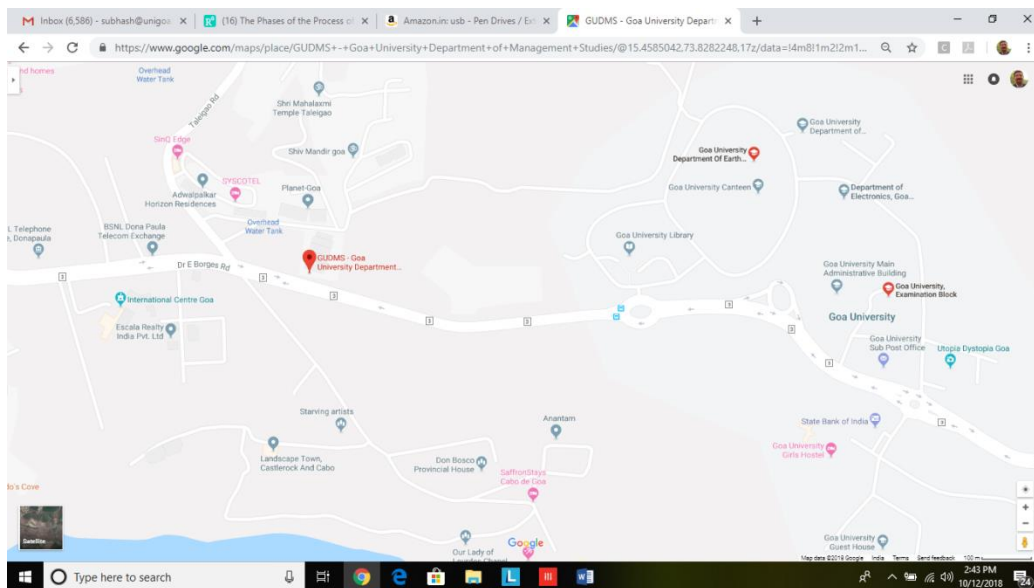
Important Dates:

Last date for submission of application	: November 30th 2018.
Intimation to selected candidates	: December 10th 2018.
Last date for making payment	: December 20th 2018.
Workshop Registration and Inauguration	: January 27th2019.
SEMWorkshop	: January 28th and 29th2019.
SNA Workshop	: January 30th and 31st 2019.

Participants are required to bring their own laptops. The required Software (trial version) will be provided.

Venue:

The Workshop will be conducted in the **Lecture Hall – 1, Ground Floor, Faculty Block – F, Faculty of Commerce and Management Studies, Goa University, Taleigao Plateau, Goa - 403206.** <https://goo.gl/maps/w2uKh3NG1qK2>



Contact:

Workshop Coordinators:

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Application Form (*Google Form fill be provided*)

1	Name [Mr / Ms / Mrs]	:	
2	Phone Number	:	
3	Email	:	
4	Postal Address	:	
5	Name of the Institution (if working)	:	
6	Name of University (where Ph. D registration is done)	:	
7	Name of research guide	:	
8	Year of Ph.D registration	:	
9	Level of knowledge on:	:	
	Multiple Regression	:	Basic / Average / Advanced
	ANOVA	:	Basic / Average / Advanced
	Factor Analysis	:	Basic / Average / Advanced
	OLS	:	Basic / Average / Advanced
	Relational data	:	Basic / Average / Advanced
10	Are you planning to apply:	:	
	SEM in your research work	:	Yes / No / Not yet decided
	SNA in your research work	:	Yes / No / Not yet decided
11	Arrival Date and Time	:	
12	Departure Date and Time	:	
13	Write up of the research proposal (maximum 500 words) clearly indicating <ul style="list-style-type: none"> • The Research Topic, • Research Gap identified and the type of Data going to be used, • Research Questions, Objectives, and Hypothesis • Research Methodology, and • Analysis tools and techniques going to be used. 		

I hereby declare that the information given above is true and correct to the best of my knowledge and if found wrong, my application is liable to get rejected.

Signature with date