

## IMPORTANT DATES

Submission of Registration form	Dec 08 <sup>th</sup> 2022
Acceptance Notification	Dec 09 <sup>th</sup> 2022

### Registration Link:

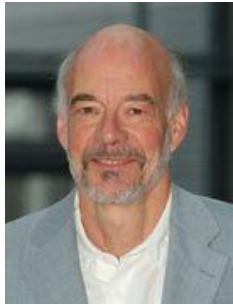
<https://forms.gle/fEVTx2R96tZ6ovSx9>

### REGISTRATION FEE: Rs. 200 (Including GST)

Payment Link: <https://vitचनाevents.com>

**Mode:** Hybrid: Offline (Venue: VIT, Chennai) and Online (Zoom)

### Course Faculty



Prof. Dr. Peter Struss,  
Technical University of Munich,  
Germany &  
Adjunct Professor,  
School of Computer Science &  
Engineering  
Vellore Institute of Technology –  
Chennai - 600 127.

### Address for Communication

Dr. B. Radhika Selvamani, Assistant Professor (Sr.),  
School of Computer Science & Engineering  
Vellore Institute of Technology – Chennai - 600 127.  
Email: radhika.selvamani@vit.ac.in, 96771 44431

Dr. S. Kirthica, Assistant Professor (Sr.),  
School of Computer Science & Engineering  
Vellore Institute of Technology – Chennai - 600 127.  
Email: kirthica.s@vit.ac.in, 94456 55558

## ABOUT THE COURSE

Cross-disciplinary real world problems from environmental modelling to industrial fault analysis could be versatile. Solving such problems requires the application of integrated models for analysis, diagnosis or therapy proposal. This course targets model building strategies and core tools for knowledge acquisition. The goal is to understand the capability of knowledge based models and apply the same to surpass the inconsistency and brittleness of existing modelling approaches, and hence solve real-world problems. The course faculty is interested in identifying potential candidates for carrying out a collaborative work with experts in the Technical University of Munich, Germany. The scope of the course includes detailed discussion on real-world problems and ways to solve them.

### Course Content

- Introduction to Knowledge-based systems
- Introduction to propositional logic
- Model-Based Systems
- Automated model-based diagnosis
  - Component-oriented Diagnosis
  - Fault detection, localization, identification
  - Theory of consistency-based diagnosis
  - Algorithms of consistency-based diagnosis

## WHO SHALL PARTICIPATE?

Academic Professionals, Students, Research Scholars, Engineers from Industries and R&D organizations - Interested in sharing their thoughts and learning from Experts



# VIT<sup>®</sup>

Vellore Institute of Technology  
(Deemed to be University under section 3 of UGC Act, 1956)

## Short Term Course

on

# Model-Based Problem Solving

10<sup>th</sup> Dec 2022 &  
12<sup>th</sup> Dec 2022 to 15<sup>th</sup> Dec 2022

### Course Coordinators

Dr. Radhika Selvamani B.  
Dr. Kirthica S.

### Organized by

School of Computer Science & Engineering  
VIT, Chennai



VIT - A place to learn; A chance to grow  
VIT - Recognized as Institution of Eminence (IoE)

## ABOUT VIT

VIT has made a mark in the field of higher education in India by providing quality education on par with international standards, through its 36 years of existence in a cross-cultural ambience with extensive application oriented research. VIT was founded in 1984 by Dr. G. Viswanathan, a former parliamentarian and Minister in the Tamil Nadu Government, as a self-financing institution called Vellore Engineering College. Since then, the institution has grown from strength to strength. Conferred as Deemed to be university in 2001 by MHRD, VIT Currently offers UG, PG and Research programmes in its four campuses at Vellore, Chennai, Bhopal and Amaravati. VIT Chennai is a globally engaged, competitive, comprehensive and research-enriched university campus strategically positioned in the capital city of Tamil Nadu, to respond to major industrial, social, economic and environmental demands and challenges. VIT Chennai is ably spearheaded by the Vice Presidents Mr. Sankar Viswanathan, Mr. G.V. Selvam, Dr. Sekar Viswanathan and Ms. Kadhambari S. Viswanathan, Assistant Vice President, Dr. Rambabu Kodali, Vice Chancellor and Dr. V. S. Kanchana Bhaaskaran, Pro-Vice Chancellor of VIT Chennai.

### The university focus is:

- To maximize the Industrial connectivity
- To create Centre of Excellence in contemporary areas of research
- To enrich Technological and Managerial Human Capital nurtured in a multicultural ambience

- To provide a common platform for the agglomeration of ideas of personnel from various walks of life for learning enrichment
- To create opportunities and exploit the available resources to benefit industry / society
- To encourage participation in the National Agenda of knowledge building
- To foster International collaborations for mutual benefits in areas of research.

## ABOUT SCOPE

The School of Computer Science and Engineering was established in the year of 2010 at VIT. The School of Computer Science and Engineering (SCOPE) at Vellore Institute of Technology was established for imparting the state-of-the-art education, training and research in the field of Computer Science and allied areas UG, PG and Ph.D. Programmes.

- B.Tech. Computer Science & Engineering (4 years)
- B.Tech. Computer Science and Engineering with Specialisation in Artificial Intelligence and Machine Learning
- B.Tech. Computer Science and Engineering with Specialisation in Cyber Physical Systems
- B.Tech. Computer Science and Engineering with Specialisation in Artificial Intelligence and Robotics
- M.Tech. Software Engineering (5 Years Integrated Programme)
- M.Tech. Computer Science and Engineering with Specialisation in Business Analytics (5 year integrated programme)

- M.Tech. Computer Science and Engineering with Specialisation in Artificial Intelligence and Machine Learning (In collaboration with C-DAC, Pune)
- M.Tech. Computer Science and Engineering with Specialisation in Cyber-Physical Systems (In collaboration with C-DAC, Pune)
- M.Tech. Computer Science and Engineering (2 years)
- M.Tech. CSE with Specialisation in Big Data Analytics (2 years)
- Master of Computer Applications(2 years)
- Ph.D. Programmes in the domain of Computer Science and Engineering.

## VISION & MISSION OF SCOPE

### Vision

- To be a world-renowned centre of education, research and service in computing and allied domains

### Mission

- To offer computing education programs with the goal that the students become technically competent and develop lifelong learning skills
- To undertake path-breaking research that creates new computing technologies and solutions for industry and society at large
- To foster vibrant outreach programs for industry, research organizations, academia and society.