RV INSTITUTIONS
Rashtreeya Sikshana Samithi Trust ®

SetCONNECT

TVS Training & Services

Embrace Your Future

Advanced Certificate in
Business Analytics
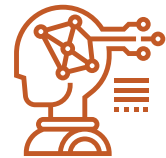
Course Brochure

GROWING CAREER OPPORTUNITIES

Average number of open job positions in analytics and data science – **90,000**

Revenue generated by the analytics function in India in **2020, $35.9 Billion**

The Indian Analytics industry is expected to grow at a CAGR of **16%** till **2025** and would touch **$75 Bn**

With growth in AI and big data, more than **30%** of businesses expect difficulty in filling their talent requirements

5 In-demand career paths for business analysts (after 3-5 years of experience) include:

- IT Business Analyst
- Data Scientist
- Business Analysis Manager
- Quantitative Analyst
- Data Business Analyst

SetConnect certificate programmes prepare you to target these career paths by:

- Establishing a rigorous statistical and quantitative foundation
- Building the requisite range of modeling capabilities
- Providing exposure to global best practices
- Giving you a platform upon which you can mold your career

Who will benefit from this Programme?

This course is relevant for under-graduates, fresh graduates and working professionals seeking to enter the field of Analytics and Data Science. No prior work experience is required.

PROGRAMME DESCRIPTION

This is a career-oriented analytics foundation programme. It equips participants with the essential skills required to prepare for a career in business and data analytics. It enables the participant to master core analytics areas of building models to solve different problems, whether in business, technical or research domains. The programme comprehensively covers predictive analytics, machine learning and prescriptive analytics. A broad range of business applications for these modeling techniques will be presented. It is part of the Foundation and Application layers in SetConnect's fasTrac™ methodology.

Get a Solid Foundation

- Be thorough in Business Statistics and their applications for Analytics
- Gain Proficiency with Python including use of libraries for Data Analytics
- Generate data visualization outputs through Tableau

Build Advanced Skills:

- Define problem solutions using predictive modeling techniques
- Identify and apply machine learning algorithms for problem-solving
- Apply prescriptive modeling techniques for optimization problems

Plan for Your Future:

- Understand career roadmaps in Analytics
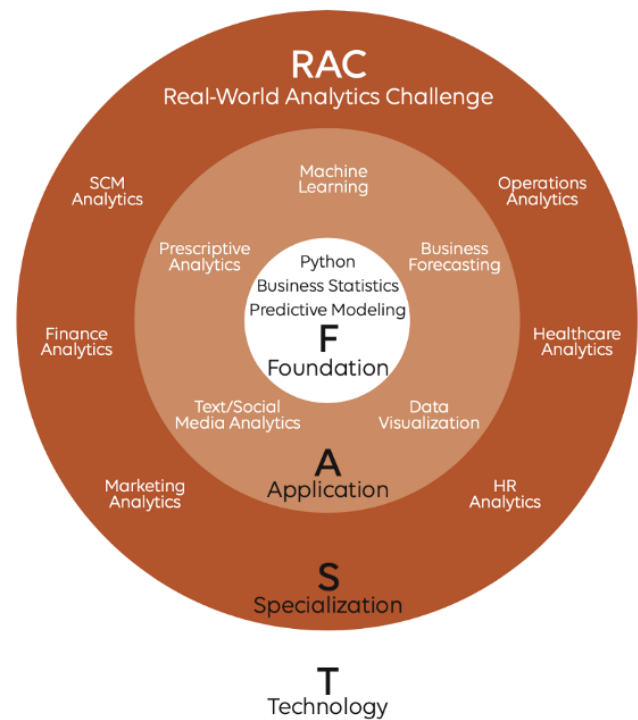- Explain analytics proposals to senior management

Benefits

- Prepare yourself for potential roles as a business analyst, business intelligence analyst, data analyst, data technician or operations analyst
- Learn directly from global faculty who have rich experience and subject matter expertise
- Become proficient with in-demand skills and open-source technologies
- Formulate and solve business problems with statistical analysis
- Leverage our industry partner network and hear directly from top companies
- Get yourself established for one of the most desirable skills for the future
- Flexible, self-paced learning to suit your individual needs
- Experiential learning through extensive hands-on projects

fasTrac Curriculum

RAC
Real-World Analytics Challenge

SCM Analytics
Machine Learning
Operations Analytics
Prescriptive Analytics
Business Forecasting
Python
Business Statistics
Predictive Modeling
F Foundation
Finance Analytics
Healthcare Analytics
Text/Social Media Analytics
Data Visualization
A Application
Marketing Analytics
HR Analytics
S Specialization
T Technology

Pedagogy

- Blended learning: The courses are delivered as a combination of live classroom (synchronous learning) and recorded sessions (asynchronous learning)

- Global faculty: The faculty team consists of well-qualified, highly experienced instructors from the US, UK and India

- Industry interaction: Interact with senior global industry experts

- Experiential learning: The courses are supported by mentored hands-on practice sessions, activities and projects

- Analytics in Practice: Opportunity to define, solve and apply analytics to an appropriately scoped industry problem working as a student-consultant at a sponsoring organization.

Duration

- **Duration:** 33 weeks, 180 hours
- Combination of both synchronous and asynchronous learning sessions
- Extensive lab and hands-on practical sessions at RVIM labs
- On an average, the student should plan to spend between 10-12 hours per week

Key Dates

- Programme commencement: **Aug 16, 2021**

- Programme completion- **March 31, 2022**

Last date for application   **Aug. 12, 2021**

Modular Certification Framework

The Advanced certification programme is structured in a modular format and comprises of 3 certification options.

Advanced Certification in Business Analytics: All the 6 subjects plus Analytics in Practice	**33 weeks, plus 2 months internal**	₹ **99,000/- plus 18% GST**
Certificate in Business Analytics Fundamentals Data Visualisation Python for Analytics	**9 weeks**	₹ **39,000/- plus 18% GST**
Certificate in Business Analytics Modeling Introductory Statistics Fundamentals of Predictive Modeling	**9 weeks**	₹ **39,000/- plus 18% GST**
Certificate in Business Analytics Advanced Applications Introduction to Prescriptive Modeling Machine Learning	**9 weeks**	₹ **39,000/- plus 18% GST**

You can independently register for any one of these Certification Programmes, carry forward the credits and complete your Advanced Certification at your own pace, or register for the **complete Advanced Certification programme and avail a discount of Rs 18,000/- special discount.**
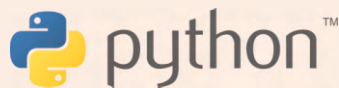
CURRICULUM

Data Visualization

- Data Analytics Process and Data Cleaning
- Visualizing Descriptive Statistics through Tableau
- Visual analytics using Tableau
- Dashboard designing and Stories
- R Studio Visual Analytics
- R Studio Maps

Python for Analytics

- Basic Data Types
- Data Structures
- Control Structures
- Error Handling
- Numerical Python
- Scientific Python
- Python Data Analysis Libraries

Introductory Statistics

- Distributions
- Probability
- Statistical Research
- Hypothesis Testing
- Regression
- Analysis of Variance
- Chi Square

Fundamentals of Predictive Modeling

- Applications of Predictive Analytics
- Unsupervised Learning
- Cluster Analysis for Supervised learning
- Classification
- Logistics Regression
- Value realization through Analytics

Introduction to Prescriptive Modeling

- Linear Optimization Models
- Linear Programming
- Sensitivity Analysis
- Transportation and Assignment Models
- Network Models

Machine Learning

- Machine learning fundamentals
- Non-Linear Regression
- Supervised ML
- Decision Trees
- K-Nearest Neighbor
- Unsupervised ML

Analytics in Practice

Supported by our industry partner

Students will work on real-life analytics projects in companies. This internship will give them an opportunity to apply the technical skills that they have learnt in the

Key Project phases:

- Define and refine Business problem
- Develop solution approach
- Collect, cleanse and mine data
- Create models as part of the solution
- Implement and execute solution
- Present result using the principles of Quantitative Storytelling

Key skills that students will acquire:

- Collaborate with Team members
- Learn methods of communication in all interactions within sponsoring organization
- Maximize benefits of mentorship from SetCONNECT faculty.
- Acquire advocacy and communcations skills through executive presentations

Key Benefits

- Understand how to apply technical skills to business problems
- Evaluate themselves in terms of strengths, weaknesses as well as interest areas
- Get practical, hands-on exposure to companies
- Increase employment opportunities by showcasing their abilities

GLOBAL FACULTY PANEL

Dr. Ramesh Rajagopalan	Douglas Gray	Dr. Novin Ghaffari	Dr. Laura Moody	Jai Ugra	Dr. Bugra Alkan

Supported by RVIM COE

Dr. Purushottam-Bung	Dr.-Bikramaditya-Ghosh	Dr. Santhosh	Prof. NNS Reddy	Prof. Dileep	Prof. Vandana Gablani

Career Support:

The RVIM SetConnect CoE provides placement and career guidance support for qualified candidates taking our certification programmes. Support includes consultation with a career counsellor and access to job postings in our network.

Registration:

For registration, please reach out to:

Phone: 080 - 4254 0300, Mobile: +91 90089 60025 or E-mail: admissions.rvim@rvei.edu.in