



RATHNAVEL SUBRAMANIAM COLLEGE OF ARTS AND SCIENCE

Autonomous & Affiliated to Bharathiar University

Reaccredited by NAAC with 'A' Grade

242-B, Trichy Road, Sulur, Coimbatore – 641 402.

Phone: +91 422 2687603 /421/480. Fax: +91 422 2687604

www.rvscas.ac.in

Best Practices I: Subject Matter Expert (SME) Development

1. Title of the Practice

Subject Matter Expert Development

2. Objectives of the Practice

It is about development of faculty in the **Data Science and Full Stack Development** Area which is in high-demand in almost all type of industries across the world.

Since the Institution is situated in the rural area, it will enable the rural students especially those who are in economically backward state, to equip with the skill sets which are in most demand in the industry and get the good career opportunities in the relevant industry. It is the **golden and blissful opportunity** to both students and faculty which is otherwise not possible for them to get this kind of skill sets in the affordable price and place.

3. The Context

This journey was started before 7 years during 2014. We started with developing the basic mathematical skills and Computer Science Fundamentals to the interested faculty team which enabled them to have a deep understanding and learn how it applied in the relevant field. It includes basic algebra, Trigonometry, Polynomials, Logarithms, Functions etc., in Mathematics and Core Fundamentals in Computer Science which includes Data Structures and Algorithms, Relational Data base Management Systems, Programming (C, Python, Java), NoSQL Databases (MongoDB, Cassandra).

The faculties started completing certifications including the platforms like Khan Academy, NPTEL Online Courses, Coursera, edX, Udemy, Udacity, Linux Academy etc.,

For enabling the faculty to spend more time on learning, the management motivated the faculties in terms of reducing the workload, by providing flexible timings, by offering monetary incentives, by setting up the right environment, by systematically setting up the career path through constant guidance and making them aware of the importance of the activity which they are involved in etc.,

4. The Practice

Practice: To prepare the students to get the right career opportunities by training them with the important concepts and Top level technologies. This is used by most of the industries including world's industry leaders and traditional companies.



RATHNAVEL SUBRAMANIAM COLLEGE OF ARTS AND SCIENCE

Autonomous & Affiliated to Bharathiar University
Reaccredited by NAAC with 'A' Grade
242-B, Trichy Road, Sulur, Coimbatore – 641 402.
Phone: +91 422 2687603 /421/480. Fax: +91 422 2687604
www.rvscas.ac.in

What is unique about RVS Curriculum?

- Faculties are Trained and certified by top level universities across the world.
- They also have gained practical experience by developing applications for various domains.
- With this knowledge, they have crafted our curriculum.

With the expertise gained, our Subject Matter Experts designed the focused and specialized curriculum which is in-line with World class Industry standards.

4.1 Section of Beneficiaries

Faculties and Students of RVS.

5. Evidence of Success

Provide evidence of success such as performance against targets and benchmarks, review/results. What do these results indicate? Describe in about 200 words.

Dedicated SME Team for Data Science and Full Stack Development:

Slowly and persistently during these 7 years, it has evolved by having the dedicated team of Subject Matter Experts in various Areas of Data Science and Full Stack Development. The SMEs are trained and certified by the top level Universities across the world including Harvard University, London School of Economics, MIT, Columbia University, Wharton School of Business, IIT Bangalore, BITS Pilani.

Setting-up the Academic Garage:

By having the collaboration with Silicon-Valley California based Do Whistle team which develops variety of web and mobile applications in real time for different business stockholders, we have set up the Academic Garage which is an unprecedented (novel) approach in our RVS campus for our MCA students to develop them as a Software Engineer using the project based pedagogy by bringing together the industry Experts, Academic Faculty and Students in the same place. It really helped to train our students with the World's Top Level Technologies such as Full Stack Development using MERN and React Native JS to develop the mobile and web applications by starting in the front end development and going towards back end and server side development using JavaScript based technology stack.

The team of industry practitioners from Do whistle directly interact with faculty and students of this programme on a regular basis. It enables the students to equip their skills and get updated with the happening of the industry and to learn the best practices of the industry development.



RATHNAVEL SUBRAMANIAM COLLEGE OF ARTS AND SCIENCE

Autonomous & Affiliated to Bharathiar University

Reaccredited by NAAC with 'A' Grade

242-B, Trichy Road, Sulur, Coimbatore – 641 402.

Phone: +91 422 2687603 /421/480. Fax: +91 422 2687604

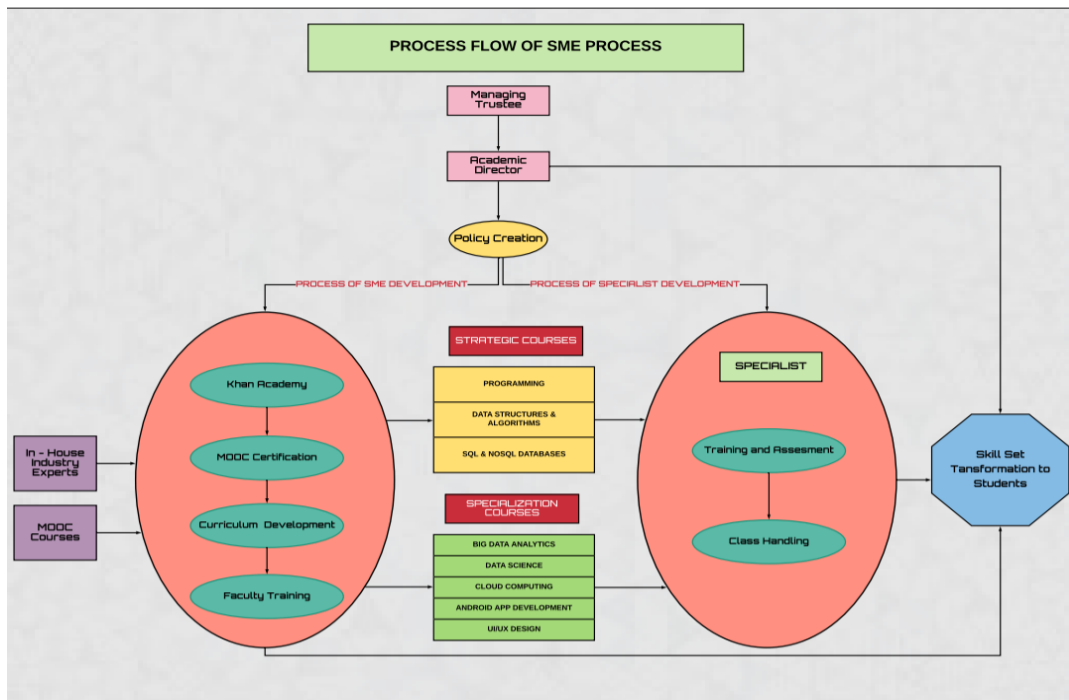
www.rvscas.ac.in

Earn-while you learn:

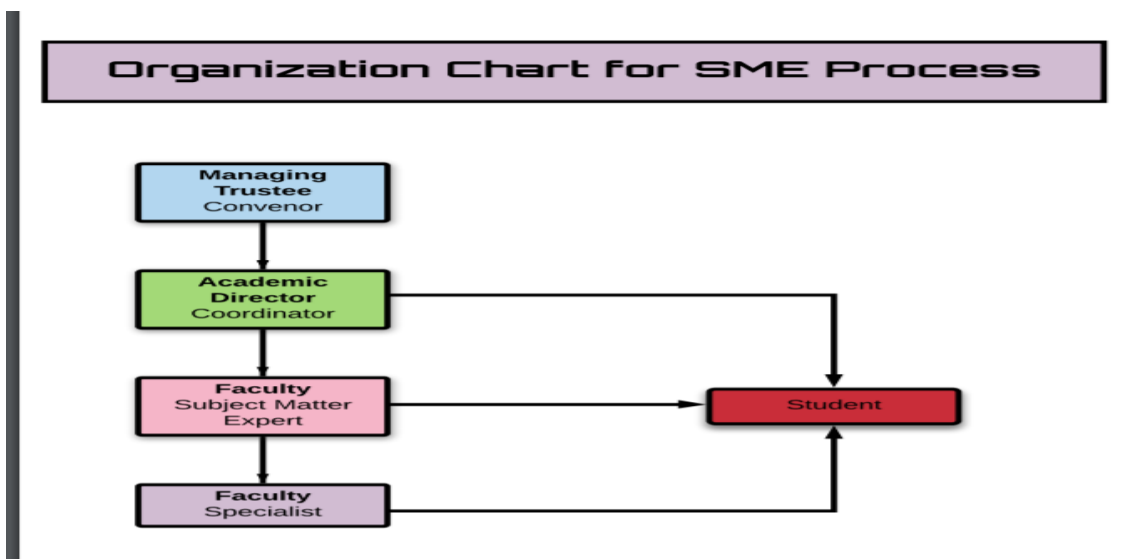
Students are getting the opportunity to work in **live projects** by developing real time applications **during their study period** through **industry internships**.

6. Problems Encountered and Resources Required

SME Process Flow Diagram:



Organization Chart:





RATHNAVEL SUBRAMANIAM COLLEGE OF ARTS AND SCIENCE

Autonomous & Affiliated to Bharathiar University

Reaccredited by NAAC with 'A' Grade

242-B, Trichy Road, Sulur, Coimbatore – 641 402.

Phone: +91 422 2687603 /421/480. Fax: +91 422 2687604

www.rvscas.ac.in

Best Practices II: RAVES (The Educational ERP)

1. Title of the Practice

“RAVES” An Online system for Academic Quality Management

2. Objectives of the Practice

- To reduce the administrative work of the teaching faculty
- To have a meticulous lesson plan
- To have all academic work done on time
- To view academic (staff and student) details centrally
- To have consolidated periodical reports (Semester wise/academic year wise/ department-wise/faculty wise)

3. The Context

Contextual Features or Challenging features:

The Following areas are identified and made available in the ERP

- Curriculum with detailed syllabus
- All processes of teaching learning and evaluation
- Research activities (Publications / Presentations / Workshops)
- Student Database
- Counselling details
- HR-Details
- Members / Minutes / Statutory Bodies
-

4. The Practice

- The system is put into practice since 2009. This is the first of this kind with such features being not available in any ERP. It provides a possibility of detailed lesson planning and the gives the work done details based on the actual teaching.
 - The system gives enormous analytical reports which helps to act towards improvement and to inculcate changes in academic processes when required.
-



RATHNAVEL SUBRAMANIAM COLLEGE OF ARTS AND SCIENCE

Autonomous & Affiliated to Bharathiar University

Reaccredited by NAAC with 'A' Grade

242-B, Trichy Road, Sulur, Coimbatore – 641 402.

Phone: +91 422 2687603 /421/480. Fax: +91 422 2687604

www.rvscas.ac.in

5.

6. Evidence of Success

- The system gives a consolidated report which was used for academic planning as well as for accreditation and audit purposes.
- The results help to analyse the performance of the faculty (APR)
- The results help to analyse the performance of the department comparing the Academic plan and the actual student support activities organized.
- The results help to analyse the students from the comprehensive picture of each and every student compiled automatically based on the inputs updated at all areas (Attendance, CIA marks etc...). This also helps to identify students who require special counseling in five important areas.
- The system does not require repetition of work thus reducing clerical work. Data entered once is used in different reports for analysis and academic improvement.

7. Problems Encountered and Resources Required

Problems encountered:

- Educating members of staff of all disciplines using ERP
- Addressing grievances in the processes
- Slow processing of the system in the initial stages

Resources Required:

- Computers for end users
 - Intranet
 - IT Technical Support Team
-