Ramaiah University of Applied Sciences, Bengaluru

in association with

Schevaran – Cleanfix Academy of Cleaning Sciences, Mysuru

Programme Specifications
Version 1.1

PG Diploma in Facility Management

Directorate of Training & Lifelong Learning
RUAS

Batch – 2022 onwards

M. S. Ramaiah University of Applied Sciences
Vision, Mission and Objectives

The M. S. Ramaiah University of Applied Sciences (MSRUAS) will focus on student-centric professional education and motivates its staff and students to contribute significantly to the growth of technology, science, economy and society through their imaginative, creative and innovative pursuits. Hence, the University has articulated the following vision and objectives.

Vision

MSRUAS aspires to be the premier university of choice in Asia for student centric professional education and services with a strong focus on applied research whilst maintaining the highest academic and ethical standards in a creative and innovative environment.

Mission

Our purpose is the creation and dissemination of knowledge. We are committed to creativity, innovation and excellence in our teaching and research. We value integrity, quality and teamwork in all our endeavors. We inspire critical thinking, personal development and a passion for lifelong learning. We serve the technical, scientific and economic needs of our Society.

Objectives

1. To disseminate knowledge and skills through instructions, teaching, training, seminars, workshops and symposia in Engineering and Technology, Art and Design, Management and Commerce, Health and Allied Sciences, Physical and Life Sciences, Arts, Humanities and Social Sciences to equip students and scholars to meet the needs of industries, business and society

2. To generate knowledge through research in Engineering and Technology, Art and Design, Management and Commerce, Health and Allied Sciences, Physical and Life Sciences, Arts, Humanities and Social Sciences to meet the challenges that arise in industry, business and society

3. To promote health, human well-being and provide holistic healthcare

4. To provide technical and scientific solutions to real life problems posed by industry, business and society in Engineering and Technology, Art and Design, Management and Commerce, Health and Allied Sciences, Physical and Life Sciences, Arts, Humanities and Social Sciences

5. To instill the spirit of entrepreneurship in our youth to help create more career opportunities in the society by incubating and nurturing technology product ideas and supporting technology backed business

6. To identify and nurture leadership skills in students and help in the development of our future leaders to enrich the society we live in

7. To develop partnership with universities, industries, businesses, research establishments, NGOs, international organizations, governmental organizations in

India and abroad to enrich the experiences of faculties and students through research and developmental programmes

Schevaran – Cleanfix Academy's Vision, Mission and Objectives

In the present scenario of global outlook, the focus has been on cleanliness & hygiene that indirectly signifies a healthy human society. In this direction, it is very much necessary to empower the cleaning & hygiene sector with engineering services, security services & automation for a successful and sustainable facility management. Developing human capital enriched with appropriate scientific & technical knowledge base and skill development is essential for taking forward this competitive and flourishing sector to higher pedestal of performance.

In realizing this objective, Schevaran Laboratories Pvt. Ltd., Mysuru, one of India's leading manufacturers of quality cleaning & hygiene products collaborated with M/s Cleanfix AG, Switzerland to establish "Schevaran-Cleanfix Academy of Cleaning Sciences Pvt. Ltd. (SCA)". Further, this collaboration was also supported by M/s FilMop, Italy. The academic program, "Post Graduate Diploma in Facility Management (PGDFM)" was developed by "Academy for Workplace Excellence", the training division of SCA, in association with Ramaiah University of Applied Sciences, a premier university with high credentials of enriching academic excellence.

Vision
Schevaran-Cleanfix Academy (SCA) is committed to provide intellectual academic knowledge and hands-on training to the prospective students who could enhance the credibility of facility management industry with well qualified human capital. They would have better academic and social commitment to strive in competitive global business.

Mission
The focus of SCA is to update the human capital of FM industry with state-of-the-art knowledge driven academic programme for enhanced performance. At the same time, impart learning that gives opportunity for creative thinking, personal interactions, all-round social development and to be a leader in their professional environment.

Objectives
1. To support education and skill development in facility management.
2. To provide appropriate scientific & technical knowledge base in identified & relevant areas of facility management.
3. To impart technical skills through hands-on practical, demonstrations and field visits in major identified areas that enable students to meet the competitive business challenges.
4. To develop entrepreneurship with socio-economical developmental leads, so as to forge ahead in the progressive global environment.
5. To enable students with lifelong learning process based on scientific & technical knowledge for problem-solving in facility management.

Programme Specifications: PG Diploma in Facility Management

Faculty	Faculty of Hospitality Management and Catering Technology and Schevaran-Cleanfix Academy of Cleaning Sciences
Department	Hotel Management
Programme Code	TBD by RUAS
Programme Name	Post Graduate Diploma in Facility Management
Dean of Faculty	Mr. Abby Mathew
Head of the Department	TBD

1. Title of the Award: Post Graduate Diploma in Facility Management

2. Mode of Study: Full Time

3. Awarding Institution / Body: M.S. Ramaiah University of Applied Sciences, Bengaluru

4. Joint Award: Schevaran-Cleanfix Academy of Cleaning Sciences, Mysuru

5. Teaching Institution: Faculty of Hospitality Management and Catering Technology, RUAS

6. Date of Programme Specifications: July 2022

7. Date of Programme Approved by the Academic Council of MSRUAS: 14th July 2022

8. Next Review Date: July 2024

9. Programme Approving Regulating Body and Date of Approval: Academic Council, RUAS

10.   Programme Benchmark: Not Applicable

11. Rationale for the Programme
There has been a long-felt necessity to align higher education with emerging needs of the economy to ensure that graduates with higher education have adequate knowledge and skills for employment and entrepreneurship. The Indian Facilities Management (FM) industry is in the midst of rapid developments in end-user industries, which has led to considerable growth of commercial activities. By 2025, around 38% of India's population is predicted to live in urban regions, and cities will account for 80% of India's GDP. The government's ambitious plan to develop 100 smart cities, attracting an investment of US $216 Billion into infrastructure, will result in a surge in infrastructure

creation, driven by sustained population growth. This will create a need for professional, holistic facilities maintenance services.

Human capital with requisite scientific knowledge and application skills in facility management is the need of the hour. RUAS together with Schevaran-Cleanfix Academy of Cleaning Sciences (SCA) intends to promote education in facilities management, through "Post Graduate Diploma in Facility Management (PGDFM)".

12. Programme Mission

The program aims to empower students to acquire an ability to manage facilities in different domains in an intelligent and effective manner to ensure smooth and continuous functioning of the said facility.

13. Graduate Attributes (GAs) - The graduate must have

GA-1. Knowledge and skill to manage facilities in a holistic manner that is a combination of professionalism, integrity, innovation and team management skills

GA-2. Skill to apply basic knowledge of chemistry and practices in housekeeping with the use of appropriate cleaning and disinfection aids in end user industry sectors

GA-3. Skill to apply knowledge and practices of Mechanical, Electrical Engineering, and Construction Management to choose appropriate materials and tools for planning and execution of operational activities & maintenance of installations with focus on hygiene and sanitation in end-target Industries

GA-4. Understanding and ability to use applied aspects of microbiology to maintain hygiene and sanitation to sustain a healthy environment in end target industry sectors.

GA-5. Skill to apply knowledge and practices of Green and Clean Technologies to sustain the environment and functional aesthetics for planning and designing of buildings safety and security

GA-6. Lifelong learning skills to update knowledge portfolio with diverse business processes for effective facility management while using analytical techniques to establish quality parameters of products to ensure business continuity

GA-7. Ability to learn and apply audit types and plans for effective internal controls and evaluation using standard operating and maintenance procedures with relevant documentation

GA-8. Ability to understand and apply people management skills to achieve harmonious team dynamics for effective facility management, along with customer focused approaches to improve customer interface skills

14. Programme Outcomes (POs)
The successful PG Diploma candidates will be able to

PO-1. Demonstrate technical skills to achieve performance efficacy meeting the satisfaction of customers / management / authority in areas of housekeeping, cleaning and disinfection process

PO-2. Solve engineering aspects related to mechanical and electrical installations as part of facility management

PO-3. Illustrate microbiological and chemical evaluation of products and process used during facility management

PO-4. Apply standard procedures in selection and application of construction materials for maintenance of buildings as per legal guidelines

PO-5. Identify the relationship between public health and hygiene & sanitation through the workflow of sanitary systems and environment friendly approaches

PO-6. Apply skills in managing business, customer interactions, quality benchmark standards and ensure lifelong learning

PO-7. Apply varied soft skills in advancing their professional careers to work in a team with effective communication in facility management

PO-8. Demonstrate project work that offers an opportunity to utilize their intellectual capabilities and learning skills to translate their innovative approaches into functional mode in an industry

15. Programme Educational Objectives (PEOs)
The objectives of PG Diploma in Facility Management programme are:

PEO-1. To facilitate knowledge gain towards understanding and solving engineering aspects related to mechanical, electrical and construction in facility management

PEO-2. To acquire knowledge and skills through learning of varied soft skills in advancing their professional careers in facility management

PEO-3. To provide significant learning skills in managing business, customer interactions, quality benchmark standards and overall professionalism

PEO-4. To impart scientific thinking through project work and utilize their intellectual capabilities and learning skills to translate their innovative thoughts into functional mode in an industry

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Post Graduate Diploma in Facility Management

PEO-5. To provide an opportunity in furthering professional careers in facility management-oriented sectors

16. Programme Specific Outcomes (PSOs)

PSO-1. Perform as per standard operating procedure and monitor workflow in facility management with focus on housekeeping and cleaning process

PSO-2. Solve Problems as required in electrical and mechanical engineering installations as part of facility management

PSO-3. Choose appropriate materials, tools and process during building maintenance as required in facility management

PSO-4. Demonstrate excellence in the functional performance of microbiology and chemistry requisites so as to meet the benchmark analytical attributes

PSO-5. Demonstrate skills that would be required to manage business process, customer interactions, quality standards and overall professionalism

PSO-6. Identify different hygiene and sanitation requirements and establish protocols for sustaining requisite standards. Also provide on-site appropriate measures to maintain safety and security in FM sector

17. Programme Structure: Each trimester is for 12 weeks
Trimester 1

Programme Structure

Trimester 1

Sl. No.	Course Code	Course Type	Course Title	Theory H/W/T *	Practical H/W/T	Total Credits	Max Marks
1	BHGC501A	CORE	Housekeeping in Workplace	3	2	4	100
2	BHGC502A	CORE	Chemistry and Process of Cleaning & Disinfection	**2**	**2**	3	100
3	BHGN503A	AECC	Mechanical & Electrical Engineering Requisites	**4**	**2**	5	100
4	BHGM504A	SEC	Basics of Microbiology	2	2	3	100
Total				**11**	**08**	**15**	**400**
Total number of contact hours per week				**19**			

Trimester 2

Sl. No.	Course Code	Course Type	Course Title	Theory H/W/T *	Practical H/W/T	Total Credits	Max Marks
5	BHGC505A	CORE	Hygiene & Sanitation Facilities	**3**	**2**	**4**	100
6	BHGC506A	CORE	Green & Clean Technologies	2	2	3	100
7	BHGN507A	AECC	Construction Management & Materials Planning	2	2	3	100
8	BHGN508A	AECC	Business Continuity & Management	2	2	3	100
9	BHGM509A	SEC	Customer Interface & Training Skills	2	2	3	100
Total				**11**	**10**	**16**	**500**
Total number of contact hours per week				**21**			

Trimester 3

Sl. No.	Course Code	Course Type	Course Title	Theory H/W/T *	Practical H/W/T	Total Credits	Max Marks
10		ELECTIVE		2	6	5	100
10.A	BHGE511A	ELECTIVE*	Airport Facility Management including Project Work				
10.B	BHGE512A	ELECTIVE*	Healthcare Facility Management including Project Work				
10.C	BHGE513A	ELECTIVE*	Hospitality & Catering Facility Management including Project Work				
10.D	BHGE514A	ELECTIVE*	Shopping Mall Facility				

			Management including Project Work				
11	BHGM510A	SEC	Quality & Analytics	2	2	3	100
12	BHGMf511A	SEC	Building Aesthetics, Safety & Security	2	2	3	100
13	BHGN512A	AECC	Audit Plans & Evaluation	2	2	3	100
14	BHGN513A	AECC	People and Social Skills	2	0	2	100
Total				10	12	16	500
Total number of contact hours per week				22			

* H/W/T: Hours/Week/Trimester

*Specialization/Elective				
Course Code ➡				
Course Title ➡	Airport Facility Management	Healthcare Facility Management	Hospitality & Catering Facility Management	Shopping Mall Facility Management

Note:
Students are required to select one elective among the above-mentioned four courses. Project work will be in the area of selected course only.

18. Course Delivery
In accordance with planned Time Table

19. Teaching and Learning Methods
1. Face to Face lectures with audio-visual support
2. Demonstrations based on diverse modes
3. Guest Lectures
4. Workshops and Seminars
5. Group Activity – Discussion and Debates
6. Field Visits including Industry Visits
7. Project Work
8. Case Studies
9. Lab-Practical – In-house and/or On-site
10. Technical based Exhibitions and Open Forum Activities

20. Assessment and Grading

Components of Grading

There shall be two components of grading in the assessment of each course:

20.1. Component 1 – Continuous Evaluation (CE)

Core Courses (**with theory & Lab-practical or Project work**)

For the course that is a combination of theory and Lab-practical sessions, the scheme for determining CE marks is as under.

The CE shall be of four sub-components, two each for theory and Lab-practical or project work [SC1, SC2, SC3 and SC4]. Each sub-component is evaluated individually for 25 marks. Both the theory sub-components -- SC1 and SC2 shall be term tests.

SC1 (Theory)   25 marks
SC2 (Theory)   25 marks
SC3 (Practical)   25 marks
SC4 (Practical)   25 marks

Core course (without Lab-practical or Project work)

The CE shall be of four sub-components, each sub-component is evaluated individually for 50 marks. Both the theory sub-components -- SC1 and SC2 shall be term tests.

SC1 (Theory)   50 marks
SC2 (Theory)   50 marks

The marks of both theory and practical and/or only theory sub-components (based on the course type) are considered in determining the CE component marks as follows:

CE = (Total of the sub-component marks) ÷ 2

The term tests can be of any of the following types:

- Theory presentation based
- Assignments – Online & Off-line
- Case Studies
- Practical (Lab) based

- Group Activity
- Seminar-cum-Presentation
- Problem Solving
- Objective based Models

20.2. Component 2 – Trimester-end Examination (TEE):

Core Courses with Practical: This component represents the summative assessment carried out in the form of an examination for 100 marks conducted at the end of the trimester. This exam will have a theory and practical component of 100 marks each. The marks scored by the candidate are considered for 25% weightage each in theory and practical, respectively.

Core course without practical: This component represents the summative assessment carried out in the form of an examination for 100 marks conducted at the end of the trimester. This exam will have a theory component of 100 marks and the weightage considered is for 50%.

Elective Course: This component represents the summative assessment carried out in the form of theory and project work examination conducted at the end of the trimester. The elective examination will include

(i) Submission of completed Project Report (30 marks),
(ii) Presentation of Project Work (10 marks)
(iii) Viva-Voce (10 marks).
(iv) Theory exam (50 marks)

Marks scored in all the above four sub-components are considered in determining the TEE component marks as follows:

TEE = (Total of the four sub-component marks) ÷ 2

Marks obtained in CE and TEE components have equal weightage (**CE:** 50% and **TEE:** 50%) in determining the final marks obtained by a student in a Course.

The assessment and evaluation pattern are focused on testing the learning ability and practical skills of the students in each of the major aspects being taught.

A minimum of overall (CE + TEE) 40% marks are required for a Pass.

The complete details of Grading are given in the Academic Regulations.

21. Student Support for Learning
1. Course Notes
2. Reference Books in the Library
3. Magazines and Journals
4. Internet Facility
5. Computing Facility
6. Laboratory Facility
7. Workshop Facility
8. Staff Support
9. Lounges for Discussions
10. Any other support that enhances their Learning

22. Quality Control Measures
1. Review of Course Notes
2. Review of Question Papers and Assignment Questions
3. Student Feedback
4. Moderation of Assessed Work
5. Opportunities for students to see their assessed work
6. Review by external examiners and external examiners reports
7. Staff Student Consultative Committee meetings
8. Student exit feedback

23. Programme Map (Course-PO-PSO Map)

Tem	Course Title	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PSO-1	PSO-2	PSO-3	PSO-4	PSO-5	PSO-6
1	Housekeeping in Workplace	3	1			2	2	3	3	3			1	2	1
1	Chemistry Cleaning & Disinfection Process	3		3		1	1	3	1	3			3	1	2
1	Mechanical & Electrical Engineering Requisites		3		1	2	1	2			3	1		1	
1	Basics of Microbiology			3		2	1	2	2				3	1	2
2	Construction Management & Materials Planning	1	2		3	1	1	2	2			3		2	3
2	Hygiene & Sanitation Facilities	1		2	1	3	2	2	3	1		1	2	2	2
2	Green & Clean Technologies	1		2	1	3	2	3	2	1		1	2	2	2
2	Business Continuity & Management				2	1	3	3	1			1		3	1
3	Quality & Analytics	1	1	3	1	2	1	2	3	1		1	3	2	2
3	Building Aesthetics, Safety & Security	2	2		2	2	1	2	1	2	1	1		2	3
3	Audit Plans & Evaluation	2	1	2	1	2	1		1	2	1	1	2	2	2
3	People & Social Skills	1				1	3	3	1	1				3	2
3	Customer Interface & Training Skills	2	1	2	1	2	3	1	2	2	1	1	1	2	2
3	*Elective Including Project Work														
3	*Elective - Airport Facility Management	2	2	1	2	3	3	3	3	2	1	1	1	3	3
3	*Elective - Healthcare Facility Management	3	1	3	1	3	1	2	3	2			3	2	2
3	*Elective Hospitality & Catering Facility Mangement	2	2	3	2	3	3	2	3	2			3	2	2
3	*Elective Shopping Mall Facility Management	2	2	1	2	2	3	3	3	2			2	3	3
3: Very Strong Contribution; 2: Strong Contribution; 1: Moderate Contribution															
Tem, Trimester; PO, Programme Outcome; PSO, Programme Specific Outcome															

24. Co-curricular Activities

Students are encouraged to take part in co-curricular activities like seminars, conferences, symposia, paper writing, attending industry exhibitions, theme-based events, inter and intra faculty technical competitions, communication fests, project competitions and related activities for enhancing their knowledge and networking.

25. Cultural and Literary Activities

Annual cultural festivals are held to showcase the creative talents in students. They are involved in planning and organizing the activities.

26. Sports and Athletics

Students are encouraged to take part in sports and athletic events regularly. Annual sports events are held to demonstrate sportsmanship and competitive spirit.