

## Department of Computer Science(Optional)

### Revised Syllabus of II Year Advanced Diploma Program (PG)

#### II Year Advanced Diploma Programme

1. Title: Agile Project Management
2. Year of Implementation: 2020
3. Duration: One Year
4. Pattern: Semester
5. Medium of Instruction: English
6. Contact hours: 7 hours/week
8. Structure of Course:

#### Syllabus Structure (PG)

Year	Semester	Course No.	Course Code	Contact Hours	Credits (1Credit=15 H)	Total Marks
1	I	CT I	ADCST 101	30	2	75
		CL I	ADCSL101	60	2	150
	II	CT II	ADCST 202	30	2	75
		CL II	ADCSL202	60	2	150
	Annual	CP I	ADCSP101	60	2	150
	Total			240	10	600
2	III	CT III	ADCST 303	30	2	75
		CL III	ADCSL303	60	2	150
	IV	CT IV	ADCST 404	30	2	75
		CL IV	ADCSL404	60	2	150
	Annual	CP II	ADCSP 202	60	2	150
	Industrial and or Incubation and or Research and or Field Training			60	2	-
	Total			270	12	600
Total				510	22	1200

AD: Advanced Diploma, \*: Departmental Code (C: Chemistry, MI: Microbiology,  
CSE: Computer Science (Entire), etc)

C: Course, T: Theory, L: Lab (Practical), P: Project

Total No. of Papers: 10 (Theory: 04, Practical: 04, Project: 02) Theory and Practical: Semester,  
**Project: Annual**

**Semester III****CT-III: ADCST 301: Title:****(Contact Hrs. 30 Agile Foundation-II Credits: 2)****Course Objectives:-**

1. To impart basic Project Management systems.
2. To Understand the Company environment.

**Unit 1: JIRA**

JIRA –OVERVIEW, JIRA – Installation , JIRA – login , JIRA – Dashboard , JIRA – Issue Creation , Clone An Issue, Create A Subtask, Convert Issue To Subtask, Convert Subtask To Issue, Create Issue Using CSV, Edit An Issue, Email An Issue, Label An Issue, Linking Issues, Move An Issue

**Unit 2: Project Management Challenges and Risk Management.**

Project Risk Management, Planning Risk Management, Common Sources of Risk in IT Projects, Software configuration management, tool-kits, workbenches, environments, Emerging software engineering trends, collaborative development & test-driven development.

**Learning Outcomes:**

At the end of the course, the students should be able to:

1. The course aims helping students to gain a solid understanding of the crucial and growing role played by project management in all areas of the modern business.
2. This course will also enable the students to expand their business communication with the technical terminology necessary for participating and/or running projects internationally.

**Reference Books:**

1. A toolkit for reaping the rewards from all your business projects by Robert Buttrick  
Prentice Hall / Financial Times, Fourth edition, 2010
2. Manifesto for Agile Software Development <http://agilemanifesto.org/>
3. Principles behind the Agile Manifesto <http://agilemanifesto.org/principles.html>
4. Agile Handbook <http://agilehandbook.com/agile-handbook.pdf>

**ADCSE302: (Practical): Agile Foundation-II Lab****(Contact Hrs. 60 Credits: 02)****Learning Objectives:**

1. To impart basic Project Management systems.
2. To Understand the Company environment.

**List of Practical's (15)**

1. Discuss the interface of JIRA.
2. Discuss the frameworks of Github.
3. Discuss the Kanban using JIRA
4. Case study: College website using JIRA framework.
5. Case study: Project Management and its Challenges(Project)
6. Case study: Project Planning and its Risk Management (Project).
7. Case study: Risks in planning hospital management website.
8. Case study: Emerging software engineering trends, collaborative development & test-driven development.

**Semester IV****CT-IV: ADCST 401: Title: Agile Framework-II****(Contact Hrs: 30 Credits: 2)****Learning Objectives:-**

1. Optimizing the flow of valuable work.
2. Building a Kanban board.
3. Using Kanban tools and techniques effectively.
4. Using measurement to make decisions.
5. Taking a lead on continuous improvement.

**Unit 1: Essentials of Kanban and Agile**

What Is Kanban? ,What Are The Origins Of Kanban?, Kanban Card Template, Kanban Board Template, What Is A Kanban System - Kanban Development Methodology? Kanban vs Kanban (Kanban versus Agile Kanban) ,

**Unit 2: Framework of Kanban**

What Is A Kanban Software and Kanban Board Software? , Tool for Project Management of Kanban, Kanban Certification, Kanban Workflow, Key Metrics To Manage A Kanban Workflow, What Visualize Your Workflow With Kanban , Limit Work In Progress (WIP) With Kanban , Implement Kanban Feedback Loops , Improve Kanban Collaboratively, Develop Kanban Experimentally .

**Learning Outcomes:**

At the end of the course, the students should be able to:

1. The course aims helping students to gain the knowledge of services such as marketing, HR, sales, technical support, or requirements analysis.
2. The course aims helping students to gain the knowledge about how to build products such as software applications.

**Reference Books:**

The following material is recommended for the course:

1. A toolkit for reaping the rewards from all your business projects by Robert Buttrick Prentice Hall / Financial Times, Fourth edition, 2010
2. Manifesto for Agile Software Development <http://agilemanifesto.org/>
3. Principles behind the Agile Manifesto <http://agilemanifesto.org/principles.html>
4. Agile Handbook <http://agilehandbook.com/agile-handbook.pdf>

**ADCSE402: (Practical): Agile Framework-II Lab****(Contact Hrs. 60 Credits: 02)****Learning Objectives:**

1. To impart basic Project Management systems.
2. To Understand the Company environment.

**List of Practical's (15)**

1. Discuss the interface of JIRA.
2. Discuss the frameworks of ---.
3. Discuss the Kanban framework
4. Case study: College website using Kanban framework.
5. Case study: Library management system using Kanban framework.
6. Case study: any Company management website using Kanban framework.
7. Case study: Any Hospital management website using Kanban framework.
8. Case study : On your project

***Learning Outcomes:***

At the end of the course, the students should be able to:

1. The course aims helping students to gain a solid understanding of the crucial and growing role played by project management in all areas of the modern business.
2. This course will also enable the students to expand their business communication with the technical terminology necessary for participating and/or running projects internationally.

***Reference Books:***

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3. Principles behind the Agile Manifesto <http://agilemanifesto.org/principles.html>
4. Agile Handbook <http://agilehandbook.com/agile-handbook.pdf>

**CP II : ADCSP 202(Project):**  
**(Contact Hrs. 30/60, Credits: 1/2 )**

Every student should take up a project and submit in the report the work he/she has carried out. Project work will be accessed independently at the time of practical examination

**BOS Sub-Committee**

1. Chairman -Dr. More Sharmila S.
2. Member – Ms Atar Roshani U.  
-Ms .Shendge G. P.

**Expert Committee**

1. Name of Academic Expert: Prof .Dr Bhavana Narain.
2. Name of Industrial Expert: Mr. Asif Hamid Shaikh  
Software Engineer, Utopia Automation and Control Pvt. Ltd.