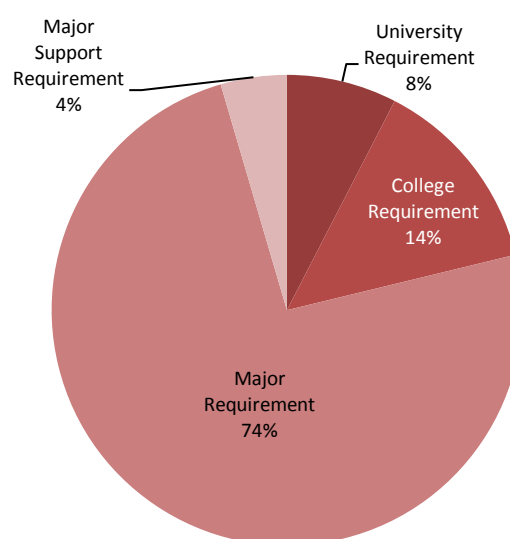


## Associate Diploma in Web and Multimedia Development – 2014

### Program Components

Course Type	CRD
University Requirement (UR)	5
College Requirement (CR)	9
Major Requirement (MR)	49
Major Support Requirement (MSR)	3
Training (Internship) No	0
<b>Total Credit (CRD)</b>	<b>66</b>



**Teaching Language:** English

### Detailed Study Plan

#### Year 1 - Semester 1

Course Code	Course Title	Course Hours			Course Type	Pre requisite	Major GPA
		LEC	PRAC	CRD			
ENGLA 111	English Language Development I	3	0	3	CR	-----	No
MATHA 111	Applied Mathematics	3	0	3	CR	-----	No
HIST 122	Modern History of Bahrain and Citizenship	3	0	3	UR	-----	No
HRLC 107	Human Rights	2	0	2	UR	-----	No
CSA 101	Introduction to IT	2	3	3	MR	-----	Yes
CSA 106	Programming Fundamentals	2	3	3	MR	-----	Yes

#### Year 1 - Semester 2

Course Code	Course Title	Course Hours			Course Type	Pre requisite	Major GPA
		LEC	PRAC	CRD			
ENGLA 112	English Communications Skills	3	0	3	CR	-----	No
CSA 121	Databases Fundamentals	2	3	3	MR	-----	Yes
CSA 126	Introduction to Digital Imaging for Multimedia and Web	2	3	3	MR	-----	Yes
CSA 131	Fundamentals of Web Development	2	3	3	MR	CSA 106	Yes
CSA 136	Interactivity and Interface Design	2	3	3	MR	CSA 101	Yes
CEA 122	Networks Fundamentals	2	3	3	MR	CSA 101	Yes

### Year 2 - Semester 3

Course Code	Course Title	Course Hours			Course Type	Pre requisite	Major GPA
		LEC	PRAC	CRD			
CSA 231	Web / Mobile Applications Development	2	3	3	MR	CSA 126 & CSA 131	Yes
CSA 236	Programming in Perl	2	3	3	MR	CSA 106	Yes
CSA 241	Digital Video and Audio Production	2	3	3	MR	CSA 126	Yes
CEA 242	Server Operating Systems Administration	2	3	3	MR	CEA 122	Yes
CSA 250	Seminars	1	0	1	MR	Completion of 35 CRD	Yes
OMA 121	Introduction to Business Administration	3	0	3	MSR	-----	No

### Year 2 - Semester 4

Course Code	Course Title	Course Hours			Course Type	Pre requisite	Major GPA
		LEC	PRAC	CRD			
CSA 261	Advanced Digital Video and Audio Production	2	3	3	MR	CSA 241	Yes
CSA 266	Web Server Administration	2	3	3	MR	CSA 231	Yes
CSA 271	Multimedia Animation Tool and Techniques	2	3	3	MR	CSA 241	Yes
CSA 276	Data Driven Websites and Applications	2	3	3	MR	CSA 121 & CSA 231	Yes
CSA 290	Technical Project	0	6	3	MR	Completion of 45 CRD	Yes

## Course Description

**Course Code:** CSA 101      **Course Title:** Introduction to IT

This course is an introductory course in information technology. Topics include foundations in hardware, software, data and an overview of the use of information technology in organizations. Practical topics include Operating system, word processing, spreadsheets, presentation, database, and networking in business environment.

Software packages: General Software solutions (MS. Office suit). Operating systems (MS. windows)

**Course Code:** CSA 106      **Course Title:** Programming Fundamentals

This course introduces problem solving strategies and the use of algorithmic language to describe such problem solving using flowcharts and visual computer programming concepts. It includes basic language elements and blocks, control structures, loops, and visual elements properties and methods.

Software packages : Visual programming software (MS. visual studio. net (VB.Net))

**Course Code:** CSA 121      **Course Title:** Databases Fundamentals

This course introduces relational databases, entity relationship diagrams, database interfaces, and SQL. Using RDBMS to create/manage databases. Design user interfaces and fulfill domain requirements.

Software packages : Relational Database Management System (MS. Access or SQL Server)

**Course Code:** CSA 126      **Course Title:** Introduction to Digital Imaging for Multimedia and Web

This course provides beginning through intermediate concepts in digital imaging. Topics covered include image editing and enhancing, original creation of composite images from photographs and artwork, drawing and painting original digital artwork, and the creation of web graphics. Students will incorporate basic design principles in their digital photographs and compositions.

Software packages Adobe Photoshop CS6 Extended , Adobe Photoshop ,Adobe in Design and FOSS

**Course Code:** CSA 131      **Course Title:** Fundamentals of Web Development

This course provides students with a foundation of XHTML skills with emphasis on code validation and semantic encoding. Students also learn how to control page appearance with cascading style sheets (CSS) and will be introduced to micro-formats.

Software packages : Plain text editor, such as Notepad, HTML Kit, BBEdit, or Dreamweaver's Code View

**Course Code:** CSA 136      **Course Title:** Interactivity and Interface Design

This course provides students with an in-depth analysis of multimedia interactivity, including the psychology of user interaction and methods for designing and developing effective navigational interfaces. Students will also learn the fundamentals of Web animation and interactivity.

Software packages: Adobe Flash CS6 Professional

**Course Code:** CSA 231      **Course Title:** Web / Mobile Applications Development

This course provides students with the opportunity to develop and refine visual design skills, building upon students' previous foundation of digital imaging, XHTML and CSS markup, and understanding of usability and accessibility. Students develop an awareness of various Web design styles and genre. They will also develop proficiency through the intermediate level in the use of Web development software.

Software packages : Adobe Dreamweaver CS6, MS Expression Suite JavaScript & FOSS

**Course Code:** CSA 236      **Course Title:** Programming in Perl

The course covers Perl language essentials, including syntax, regular expressions and data types. Perl code development, including accessing and manipulating files. Web site implementation, including database connectivity and debugging techniques

**Course Code:** CSA 241      **Course Title:** Digital Video and Audio Production

This course introduces students to Video/Audio solutions for broadcast, production, corporate, education, medical, and government markets. It introduces the basic Video/Audio formats, capture video/audio streams, video/audio converters, and basic and advance editing using video/audio software.

Software packages: MS. Movie Make, VSDC Free Video Editor & FOSS

**Course Code:** CSA 250      **Course Title:** Seminars

In this course students will be introduced to ethical and professional issues in the market through internal and external speakers.

**Course Code:** CSA 261      **Course Title:** Advanced Digital Video and Audio Production

Using specialized video and audio processing software. Integrating different objects and techniques to generate professional video streams. Creating virtual reality environment using still images.

**Course Code:** CSA 266      **Course Title:** Web Server Administration

Introduces students with theoretical and practical aspects of web servers, users, and servers infra structures. Students will also learn how to Install and configure web servers as well maintaining servers' environment. Software packages: Microsoft server, IIS. or Apache server

**Course Code:** CSA 271      **Course Title:** Multimedia Animation Tool and Techniques

This course introduces multimedia and its components. Benefits of the use of multimedia in business, developing multimedia applications. Software, tools and techniques. Open source development tools.

**Course Code:** CSA 276      **Course Title:** Data Driven Websites and Applications

This course explores the strategies and issues surrounding online, server based websites and applications that rely on a database server. Through the exploration of server side scripting languages. Topics includes create databases, connect to data services and ultimately read from and write to a data server. A strong emphasis will be placed on semantics, syntax, and integration.

Software packages: Web visual programming, Ajax

**Course Code:** CSA 290      **Course Title:** Technical Project

This course guides the student to submit his/her graduation project. The student should employ all theoretical and practical expertise to deliver computer system. The student should follow the system development life cycle (SDLC) and project management processes.

**Course Code:** OMA 121      **Course Title:** Introduction to Business Administration

Overview of business administration as a field of study and practice, survey of major functional specialties within business management, accounting finance, marketing and production ,inter-relationships among various specialties and foundation – level understanding of the management profession.

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## College Requirement and Major Support Courses Descriptions

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**Course Code:** ENGLA 111                      **Course Title:** English Language Development

This course emphasizes on developing the English language skills of students in the Applied programs. The course focuses mainly on improving the language skills of basic grammar, writing and vocabulary. A major component of this introductory course will be listening, speaking and reading skills necessary in understanding others in working environment.

**Course Code:** MATHA 111                      **Course Title:** Applied Mathematics

The number system, Basic Algebra, Expansion, factorization, Transposition of formula, Solving Equations, Function, Definitions, Sequence and Series Relations, Differentiation, Standard Derivative, Integration and Applications, Matrices.

**Course Code:** ENGLA 112                      **Course Title:** English Communications Skills

This course emphasizes the development of English Language skills of students enrolled in the Applied Studies Programmes. The course focuses mainly on improving reading comprehension and accuracy, building vocabulary skills and improving listening comprehension.

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## University Requirements Courses Descriptions

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**Course Code:** HIST 122                      **Course Title:** Modern History of Bahrain and Citizenship

Spatial identity of Bahrain: Brief history of Bahrain until the 18th century; the historical roots of the formation of the national identity of Bahrain since the 18th century; the modern state and evolution of constitutional life in Bahrain; the Arabic and Islamic dimensions of the identity of Bahrain; the core values of Bahrain's society and citizenship rights (legal, political, civil and economic); duties; responsibilities and community participation; economic change and development in Bahrain; Bahrain's Gulf, Arab and international relations.

**Course Code:** HRLC 107                      **Course Title:** Human Rights

This course deals with the principles of human rights in terms of the definition of human rights, scope, sources with a focus on the International Bill of Human Rights; The Charter of the United Nations; Universal Declaration of Human Rights; The International Covenant on Economics, Social and Culture rights; Convention against Torture and other Cruel, Inhuman or Degrading Treatment or Punishment; Mechanics and the Constitutional Protection of Rights and Public Freedoms in Kingdom of Bahrain.