

Multimedia Applications

Bachelor of Information Technology and Systems

Multimedia is one of the most innovative and fast-growing areas of information technology and design, providing exciting career opportunities. Multimedia combines different media – images, film, sound, words and animation – into an interactive package that presents information in a variety of forms, and allows people to use it in a way that best suits them.



The Multimedia Applications major gives you a broad understanding of the diverse disciplines involved in developing multimedia systems. You'll learn about digital and interactive systems and the important links between technological and presentation skills. You'll also learn how to build content for CD ROMs and games, explore narrative and animation concepts, and delve into topics including multimedia imaging, educational multimedia, sound and video.

While studying Multimedia Applications at the Berwick campus, you'll make extensive use of studio mode learning. This includes flexible access to state-of the art computer labs and very "cool" studios, a sound recording studio, and professional editing suites. Within the studios, final year students work in teams on the development of a working application or exhibition for a real client.

Some of the topics covered include visual communications, sound and video, 3D, educational multimedia and interactive environments, data communications and networks, website development, and human-computer interaction in the multimedia context.

Options to study topics such as advanced website authoring, animation and special effects, information visualization or digital video post production are also available.

Career information

Graduates can choose career paths in areas such as education, graphic design, publishing, marketing, business or the entertainment sector. Possible careers are also:

- Educational developer
- Website developer/supervisor
- Animator, 3D modeller
- Games developer
- Video/sound producer
- Sound editor
- Interactive programmer
- Special effects engineer
- Project manager

Bachelor of Information Technology and Systems Multimedia Applications major

Monash course code: 3334. CRICOS code: 054529J. Berwick campus

Course structure

First year

FIT1001 Computer systems – Introduces basic computer hardware and operating systems software with emphasis on the concepts required to understand the low-level and internal operations of computer systems.

FIT1002 Computer programming – Provides an overview of programming and its role in problem-solving and strategies for meeting user requirements and for designing solutions to programming problems.

FIT1003 IT in organisations – Provides the organisational and social context for the technical core units, and introduces students to the professional roles and responsibilities of IT practitioners.

FIT1004 Database – Introduces the principles and concepts of database systems, including planning, designing, using and implementing a data model using an enterprise-scale relational database system.

FIT1005 Networks and data communications – Introduces the fundamentals of distributed networked environments, and provides knowledge of internetworking standards and understanding of the networking architecture, technology and operation.

FIT1012 Website authoring – Introduces the concepts of website authoring, from design to implementation, providing experience for students in developing the skills to create digital content for the web.

VCM1001 Visual communication (Art and Design) – Introduces methodologies for creative problem solving in design and the exploration and manipulation of design elements.

VCM1002 Multimedia imaging: moving image studies (Art and Design) – Manipulate and incorporate time based digital media within multimedia productions. Areas covered include motion graphics, sound and video production.

Second year

FIT2001 Systems analysis and design – Provides an overview of the main techniques used for carrying out analysis and specification of the design of a computer system, with a focus on the unified modelling language (UML).

FIT2002 IT project management – Provides both a theoretical and practical overview of processes involved in managing large projects, with particular emphasis on projects common to the IT industry.

FIT2012 Digital media authoring – Provides a focus on specialist tools and techniques that are used for developing content-rich interactive multimedia systems. Students will create CD-ROM products using industry standard authoring tools.

FIT2015 Foundations of 3D – Introduces the techniques, frameworks and conceptual processes comprising 3D design and production. Students develop skills in conceptual development, storyboards, modelling, texturing, lighting and simple animation techniques for 3D projects

FIT2016 Human-computer interaction for multimedia – Development of multimedia that enhances the efficiency, safety, functionality, usability and the aesthetic appeal of the user experience. Topics include: cognitive psychology, health and safety issues relating to interaction, interface design and implementation, evaluation and testing, affective aspects of technology, social implications of Human-Multimedia (Computer) interaction.

FIT2026 Sound and video – Authoring techniques used to create motion based digital audiovisual content applied in areas such as education, corporate profiling, documentary and animation (as used in video, CD ROM and DVD production).

Two elective units – These are free choice level 1, 2 or 3 units which may be taken from within the Faculty of Information Technology or from any other faculty in the university.

Third year

FIT3039 and FIT3040 Studios 1 and 2 – In these two units spread over 12 months, students work as a team, using project planning/management skills to design, build and deliver a game system under the guidance, where possible, of a commercial client.

FIT3023 Interactive environments – This unit explores the various types of interaction, simulation and visualisation related to creating interactive games based content.

FIT3033 Principles of educational multimedia – Educational theory and practice, cognitive development, the differentiation between child and adult learners, catering to differences in the capacity to learn, creating immersive and interactive learning environments, current debates surrounding e-Learning.

FIT3044 Advanced website authoring – Looks at more advanced techniques which are available to web site developers in publishing rich media/multimedia content.

OR

FIT3001 Animation and FX – Advanced theories and techniques of 3D animation and creating special effects using 3D software packages.

FIT3020 Information visualization – The human sense of vision is a powerful tool for pattern recognition – this can be harnessed via multimedia interactive presentations.

OR

FIT3008 Digital video post production – Develops further, an understanding of the multimedia development process and the tools and techniques used to manage and control it as applied to advanced time based media manipulation in multimedia content production.

Two elective units – These are free choice level 2 or 3 units which may be taken from within the Faculty of Information Technology or from any other faculty in the University.

Disclaimer: While the information provided in this document was correct at the time of publication, Monash University reserves the right to alter procedures, fees and regulations should the need arise. Students should carefully read all official correspondence, and other sources of information for students (such as websites) to be aware of changes to the information contained in this document. This information was published correct as at April 2008.

CRICOS provider: Monash University 00008C. BITS-MA-07a

Find out more today!

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