+ve thing from 200 and 300 level cources

Tooksomething from the course and applied it

What I learnt in the project that would have been usefull for Ara to teach

Go through tutorials and see what I can do now for comparison to what I can do at the end of the course

# Tutorials from Microsoft – What I know (13/8/2018)

ASP.NET

1. Getting started with ASP.NET MVC 5 NO
2. Getting started with ASP.NET Web API 2 NO
3. Getting started with Signal R Z NO
4. Getting started with Entity Framework 6 Code first using MVC5 NO
5. Migrating ASP.NET MVC applications to windows containers NO

.NET

1. Console Application YES
2. REST Client NO
3. Inheritance in C# and .NET YES
4. Working with LINQ NO
5. Microservices hosted in Docker NO
6. String Intrpolation NO
7. Using attributes YES

ASP.NET Core

1. Build an application on a Mac NO
2. Build a website with visual studio on windows YES
3. Build a web API NO
4. Get started with entity framework core and ASP.NET Core NO
5. ASP.NET Web API help pages with swagger NO
6. Deploy an ASP.NET Core web app to Azure using visual studio NO

# Past Classes – What I have learnt

## BCIS301 – Management of Information and Communication Technologies

<http://www.ara.ac.nz/study-options/qualifications-and-courses/course-display?course=112048&title=Management%20of%20Information%20and%20Communication%20Technologies>

To provide students with an overview and components of the IT management function. To help students differentiate between technical and business management of the IT function. To enable students differentiate between project management and strategy management for IT. To provide students with understanding of various standards, frameworks and models that can be employed for strategic management of the IT function. To provide students with hands on experience related to advanced risk and change management practices through application of case studies.

**Learning Outcomes**

* Analyse and discuss the strategic importance of information and information technology within organisations
* Understand corporate intelligence and business process re-engineering within the context of IT management.
* Be familiar and apply frameworks for strategic analysis of an organisation's current position in use of IT and the ways in which the organisation can benefit from use of IT in future.
* Apply frameworks for evaluation of different IT strategy options that could be available to an organisation.
* Identify best business and IT aligning framework that can be applicable to a certain case - in the context of strategy planning for IT.
* Apply the concept of strategy hierarchy to cases and drive a defined business goal (vision) down to determining IT projects in order to deliver the organisational business vision.
* Identify clear steps (phases) in developing IT strategies for an organisation.
* Identify, compare and contrast key roles for IT solutions within organisations.
* Describe enterprise architecture and social informatics within organisations.
* Assess complexity of the IT function, resource requirements and develop strategy level risk management plans.
* Compare and contrast various IT roles and skills within the sector and be familiar with at least one IT skills framework.

## BCPR301 – Advanced Programming

<http://www.ara.ac.nz/study-options/qualifications-and-courses/course-display?course=112074&title=Advanced%20Programming>

The aim of this course is to give students an understanding of programming for reuse. To ensure students have the knowledge and experience to effectively learn a new programming language. To explore pragmatic issues in the craft of programming. To provide experience with scripting languages and other techniques for integrating software components. To ensure students have the knowledge and experience to choose the appropriate mix for a problem and then develop the solution, implement it and evaluate it.

**Learning Outcomes**

* Choose and implement appropriate design patterns
* Learn and apply a new programming language
* Appropriately identify and apply techniques for integrating software components and frameworks
* Evaluate the effectiveness of work, and make recommendations accordingly

## BCPR282 – Best Programming Practices in Java

<http://www.ara.ac.nz/study-options/qualifications-and-courses/course-display?course=112069&title=Best%20Programming%20Practices%20in%20Java>

To develop student competence in a programming language . To provide students with the knowledge, understanding and skills necessary to both develop and maintain commercially relevant programs, and follow them through to implementation. To have the student finish a sizeable software project and create a portfolio containing examples of their work. To compare Java with another programming language. (normally the one studied in BCSE102)

**Learning Outcomes**

* Describe and use common Design Patterns, Algorithms and programming language Idioms
* Use appropriate software life-cycle models and software construction steps
* Design programs
* Design user interfaces which conform to recognised usability criteria
* Code programs in the specified language using the prescribed standards
* Produce and execute testing strategies at the systems level using a unit testing framework
* Debug and test programs to the systems level
* Provide all appropriate systems level documentation
* Maintain existing programs and update documentation
* Compare and contrast the features and uses of different programming languages

## BCIT388 – Mobile Technology

<http://www.ara.ac.nz/study-options/qualifications-and-courses/course-display?course=150949&title=Mobile%20Technology>

To give students the necessary skills and knowledge to analyse and determine the ways in which orgainisations can benefit from the use of mobile technology, design and develop a prototype application and plan for implemtation.

**Learning Outcomes**

* Conduct analysis on emerging and current mobile technologies and their role in enabling organisations for achieving outcomes.
* Understand and apply frameworks for business analysis in using mobile technologies in organisations.
* Demonstrate the characteristic features of a proposed innovative mobile application by creating a prototype proof of concept solution.
* Investigate specific design issues pertaining to mobile applications and develop a conceptual framework and architecture for solutions.
* Design, develop and test prototype applications for mobile devices.

## BCIS201 – Alternative Modelling

<http://www.ara.ac.nz/study-options/qualifications-and-courses/course-display?course=109341&title=Alternative%20Modelling>

To provide students with a broad understanding of the role of IT solutions within organisations. To enable students to understand and identify the ways in which changes can be introduced in organisations by application of IT solutions. To assist students with the knowledge of phases of deploying IT solutions within organisations. To enable students to be familiar with various strategies for solution development and deployment - including methodologies for assessing options and determining most suitable strategies for developing and putting in place IT solutions.

**Learning Outcomes**

* Identify and explain (using real life case studies and examples) the role IT solutions play in enabling organisations to achieve productivity gains and business performance enhancement.
* Conduct analysis and identify functions and/or areas (within organisations) that can benefit from change by use of IT solutions and applications.
* Determine which solutions and applications can positively impact on business functions (within an organisation).
* Identify and explain various approaches that can be considered for either development or deployment of IT solutions and applications within organisations.
* Compare and contrast approaches discussed in learning outcome 4.
* Determine factors (parameters) that need to be investigated in order to identify best practice (most suitable option) for development/deployment of IT solutions.
* With reference to learning outcome 6, conduct analysis to recommend the best option for deployment of IT solutions within an organisation for a given real life case study.

## BCIS202 – Service Management

<http://www.ara.ac.nz/study-options/qualifications-and-courses/course-display?course=112046&title=Service%20Management>

To enable students to apply both service and project management tools and techniques to efficiently and effectively implement change within the context of an information technology (IT) environment

**Learning Outcomes**

* Apply standard IT service management and change management processes and procedures
* Apply project management tools and techniques to an IT related project, to analyse and solve problems
* Investigate and generate solutions to problems using knowledge in a current or emerging area of IT

## BCIS285 – Software application and IS Testing

<http://www.ara.ac.nz/study-options/qualifications-and-courses/course-display?course=181236&title=Software%20Applications%20and%20IS%20Testing>

To provide students with sufficient knowledge and skills to plan and apply basic to moderate testing solutions in developing IT applications and solutions.

**Learning Outcomes**

* Understand testing methods, types and levels.
* Apply knowledge of testing procedures used throughout the Software Development Life Cycle and solution development frameworks.
* Understand static testing techniques and have the ability to organise and manage a static testing process - all stages.
* Apply knowledge of test design techniques for various scenarios and the ability to apply them.
* Understand test management required planning and documentation for a test project.
* Use a range of software and other tools for testing.

## BCIT253 – Interactive media tools and concepts

<http://www.ara.ac.nz/study-options/qualifications-and-courses/course-display?course=301265&title=Interactive%20Media%20Tools%20and%20Concepts>

To provide students with fundamental knowledge of tools and concepts to produce interactive media applications.

**Learning Outcomes**

* Describe and apply the features of digital tools used in the production of interactive media.
* Discuss and apply the interactive media development life cycle stages in the production of an interactive media application.
* Discuss and use interactive media design principles.

## BCPR203 – Database management Systems

<http://www.ara.ac.nz/study-options/qualifications-and-courses/course-display?course=112063&title=Database%20Management%20Systems>

The aim of this course is to gain an understanding of the significance of Database Management Systems (DBMS) in business; to acquire the knowledge and skills to design, develop, implement and use a commercial relational database business management system for a simplified real-world application.

**Learning Outcomes**

* Define and analyse the major objectives of database technology
* Explain and define the relational model for databases
* Demonstrate expertise in SQL
* Demonstrate experience in the design, development, implementation and use of a relational database
* Analyse the role of Database Administrator
* Explain the functions of a DBMS
* Explain the issues involved in the web access of a database

## BCPR280 – Software Engineering 2

<http://www.ara.ac.nz/study-options/qualifications-and-courses/course-display?course=112064&title=Software%20Engineering%202>

* To introduce students to software engineering processes and practices which assist in delivering high quality software at agreed cost and schedule.
* For students to apply the Personal Software Process.
* To provide students with the knowledge, understanding and skills necessary to both develop and maintain commercially relevant programs, and follow them through to implementation.
* To have the student finish a sizeable software project and create a portfolio containing examples of their work.

**Learning Outcomes**

* Evaluate and compare different software life-cycle models and software construction steps.
* Evaluate software design quality.
* Systematically debug and test programs to the systems level.
* Maintain existing programs and update documentation.
* Collect and interpret software metrics.
* Describe and use common Design Patterns, Algorithms and programming language Idioms.
* Design and code programs and user interfaces which conform to recognised standards

## BCPR283 – Best Programming Practices in .NET

<http://www.ara.ac.nz/study-options/qualifications-and-courses/course-display?course=112071&title=Best%20Programming%20Practices%20in%20.NET>

To develop student competence in a programming language To provide students with the knowledge, understanding and skills necessary to both develop and maintain commercially relevant programs, and follow them through to implementation. To have the student finish a sizeable software project and create a portfolio containing examples of their work. To compare .NET Programming with another programming language. (normally the one studied in BCSE102)

**Learning Outcomes**

* Describe and use common Design Patterns, Algorithms and programming language Idioms
* Use appropriate software life-cycle models and software construction steps
* Design programs
* Design user interfaces which conform to recognised usability criteria
* Code programs in the specified language using the prescribed standards
* Produce and execute testing strategies at the systems level using a unit testing framework
* Debug and test programs to the systems level
* Provide all appropriate systems level documentation
* Maintain existing programs and update documentation
* Compare and contrast the features and uses of different programming languages

## BCPR294 – Server Side Programming

<http://www.ara.ac.nz/study-options/qualifications-and-courses/course-display?course=150951&title=Server%20Side%20Web%20Programming>

To design and implement programmatically controlled web based interfaces for electronic commerce; to programme the main sub-components of electronic commerce; and to apply and analyse functionality design issues in online commerce.

**Learning Outcomes**

* Use a server side scripting language to program data base connection solutions and web to database interconnections; programme dynamic page generation for applications such as product displays, shopping carts, client management, order management and other online applications; and program a user-friendly client interface for a web service.
* Analyse issues in server side programming with respect to best practice, and issues that exist in a server-side programming environment.
* Design and implement and test small systems that require server side scripting
* Use supplied classes for functionality such as PDF creation, database connection and query etc.

# What I would have been like to have been taught

* Single Page Web Applications
* Deploying solutions properly and the information that comes with them (Specific to the solution documentation to be used by users)