

# Available Resource Material

August 2010

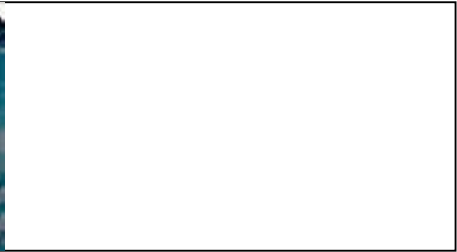
## Learner Guides

1. Restricted Registration
2. Open Registration
3. Structured Cabling
4. Fibre Optics
5. Coaxial cabling
6. Aerial and Underground
7. OH&S
8. Hand and Power Tools (Telecommunications)
9. Rectify faults and alter cabling systems
10. Cert II in Telecommunications
11. Cert III in Telecommunications
12. Cert II in Technical Security
13. SMATV – Digital Reception Technology
14. Understanding IP Networks

Incorporating:

Web-Learning a new concept in blended learning  
available to all RTO`s using Integracom  
Resources





Reserved for Duplex Printing



## Over-View

### Over-View



Integracom in conjunction with **TITAB** offer a range of Resource Material for Telecommunications and Security training that is recognised as a leading edge resource used by Training Organisations nationally including TAFE.

The course material is based on Australian Standards but incorporates input from Industry professionals including manufacturers, Installers, consultants and other Training Organisations.

Our manuals are "Living Documents" and are regularly upgraded as standards and installation practices change. This ensures that all resource material is current.

For each type of Training Course there is an instructors pack available which includes

- (1) Full Power Point Presentations
- (2) Answers to all Workbook Questions
- (3) Sample Exam Papers

Our flexibility in distributing our resource material ensures that orders are dispatched within 5 working days of placing that order.

The manuals now form part of the TITAB list of approved resource material for Telecommunications Training

Integracom offers a full back up Technical Service to instructors nationally.

Student learner guides are comprehensive and include all the material required by the student to complete the course.

As Telecommunications Training falls under three different categories, our training material has been packaged to suit each individual category.



## References



### References

Our resource materials are now used nationally by a number of TAFE Colleges and Private RTOs.

These manuals have undergone and completed trials within the TAFE environment and have been part of the TAFE Moderation process in WA and SA for the last six years.

Below is a part list of some of colleges and lecturers that utilise the resource material listed in this document.

Challenger TAFE (Rockingham WA)	Grahame Aldridge
Polytechnic West TAFE (Midland WA)	Paul Kilcullen
Polytechnic West TAFE (Thornlie WA)	Trevor Breed
Polytechnic West TAFE (Balga)	John Waswo
Albany TAFE (WA)	Garry Christiansen
TAFE SA (Regency)	Peter Berry
TAFE SA (Regency)	Graham Palmer
TAFE SA Electronics	Christine Haydon
TAFE SA (Tea Tree Gully)	Alan Manley
Durack Central West TAFE WA	Maarten Plug
Victoria University	Dean Eaton
Box Hill Tafe – Defence Victoria	Mal Davis
Chadstone Gipps TAFE	Leon Thacker
Bendigo Tafe	Joe Henry
Chisholm Institute Victoria	Stuart Blamey
Tamworth TAFE NSW	Ron Allen
GyMEA College of TAFE NSW	Jeff Teasel

Please feel free to contact any of the above mentioned lecturers or colleges if you require any further information on resource suitability, support material or comments in relation to dealing with Integracom.



## On Line Blended Learning



### Blended Learning – Web Learning

#### Background

Integracom Training Solutions is an RTO that is scoped to deliver professional training and consultancy services to the Security, Digital Reception Technology and Telecommunications industries in Australia, an area identified as suffering a current national "Skills Shortage".

Integracom recognised the need for written resource material to be utilised with an on line learning platform to enable students to self study the theory units associated with many of the competencies used in the regulatory environment for training.

This has the major advantage of reducing the amount of time required for face to face classroom delivery without reducing the quality of the training; as the student is exposed to a range of multimedia which enhances the learning experience.

Integracom, in conjunction with industry and TAFE have developed an Web based learning solution by implementing initiatives on a common platform that is beneficial not only to students who wish to study at their own pace but also to the lecturer and RTOs as they can monitor progress and mentor students throughout the process.

The system also allows the student to move forward and backwards through the multimedia which helps reinforce certain underpinning knowledge critical to retention.

Current training methods can be summarised as:

1. Face to face classroom-based training.
2. Recognition of Prior Learning
3. Student self-paced learning incorporating face to face assessments.

The web-learning platform allows streamlining of these processes.



The web-learning or “Blended Learning” concept does not negate the need for the technician to attend a classroom for a face to face session but it does allow for the student to self study at their own pace and then attend the class for the final assessments, thus reducing the amount of contact hours required.

The web-learning unit can also be used as a tool for assessing students who wish to be assessed under Recognition of Prior Learning by giving the student access to short controlled assessments which can gauge their underpinning knowledge of each competency Unit.

The web learning unit can also be used for students to complete prerequisite units for Open Registration prior to attending a full face to face classroom environment. These are for example OH&S, AC/DC Theory and basic hand and power tools.

### Concept

“Moodle” is a learning platform commonly used in the TAFE and general RTO systems. It is a tried and tested technology backed by a large community of developers and forums.



Moodle is a Course Management System (CMS), also known as a Learning Management System (LMS) or a Virtual Learning Environment (VLE).

Integracom as an RTO embraced that technology and modified it to be used to complement the existing resource material used for the delivery of telecommunications and technical security training courses.

One of the primary issues with e-learning programs is the maintenance of the content as well as the database including manageability and back up procedures.

Integracom is a resource development company, constantly updating the written resource material used for the delivery of relevant training courses. Web-learning in a box is a natural progression enabling blended learning to be streamlined into current training programs.

It is essential that the multimedia presentations and assessments that form part of the web-learning system are upgraded as part of the written resource material upgrades.



### **Support Material.**

The Web-learning concept is designed to support the written resource material; the multimedia presentations alone do not cover all the course material to a level required for a regulatory outcome.

Media content is designed to reinforce essential knowledge and to show simulations of real time environments.

Studies have also shown that if learning is conducted via e-learning only students tend to skim over information instead of assimilating that information.

Therefore utilisation of the written material is a key component for note taking and retention.

### **Benefit to Students**

The students will benefit in the following key ways:

#### **Learning Pace**

Face to face learning does not always account for the differences in the learning capacities of individuals. Course content and time allocation does not always allow for deviation from the often fast pace of course delivery. Students studying via E-Learning have the ability to study at their own pace, and review as often as necessary. A question forum will enable students to ask for help when needed.

#### **Learning Styles**

Current face to face learning programs do not always account for the differences in the learning styles of individuals. A range of methods are employed using Web-learning to enhance the learning outcomes of students including video demonstration, interactive animations, student forum etc. Lessons can be as long or short as the student wishes.

#### **Controlled Progress**

Students will be required to demonstrate understanding of the material before being allowed to progress through the course, or must ask for assistance.

Students will have the ability to access the lessons as many times as they feel necessary to gain an understanding of the topics,



### **Benefit to Instructors and administration staff**

The instructor/RTO will benefit in the following key ways:-

#### **Resource Allocation**

Blended learning dramatically reduces the time an instructor needs to spend in class delivering content that can be learned through self paced Web-learning thus increasing the amount of students that can be trained utilising limited resources.

#### **Assessments**

A Web-learning platform allows for the student to progress through the chapter assessments and obtain an instant result. The results are obtainable by an instructor or assessor.

Questions are grouped and graded in such a way that an assessor can ascertain which specific topics a student may have learning difficulties with and mentor the student through that topic.

#### **Progress Reporting**

One of the critical flaws in self paced study is that of the student leaving the study and assessments to "the last minute" and cramming the information. This results in the student retaining critical information for assessment purposes without gaining or understanding critical knowledge.

As the instructor has complete visibility on the student's progress, students can be notified of the time constraints for each chapter thus reducing the probability of "Cramming".

**For more information on web – based learning contact Carl on**

**Tel:** 08 9355 5770  
**E Mail** carl@integracom.com.au





## Cabling Registration Restricted and Open

Name	Cabling Registration
Training Area	Electrical Apprentices / New entrants
Institution Type	TAFE – Electrical Training Colleges
Web – Based	Yes

### Material Available

#### Code CH001      **Restricted Registration**

Mapped to	ICTTC 136D	Competency Based Training
	NUE / NTC 199	Module Based Training
	UEENEEF001B	Electro Technology Based

**Cost**                      **\$70.00 + GST**

#### Code CH002      **Restricted + Upgrade to Open Registration**

Mapped to	ICTTC 136/137D	Competency Based Training
	UEENEEF00 1B/2B	Electro Technology Based

**Costs**                      **\$130.00 + GST**  
**Includes Termination Tool and UTP Stripper**



#### Code CH003      **Open Registration**

Mapped to	ICTTC 137D	Competency Based Training
	NUE 190/192/NTC111	Module Based Training
	UEENEEF002B	Electro Technology Based

**Costs**                      **\$130.00 + GST**  
**Includes Termination Tool and UTP Stripper**





## Structured Cabling Optical Fibre Coaxial Cable

Name	Endorsements
Training Area	Electrical Apprentices / Open Registration Holders
Institution Type	TAFE – Electrical Training Colleges
Web – Based	Yes

### Material Available

#### Code CH004      **Structured Cabling**

Mapped to	ICTTC 009D	Competency Based Training
	NUE / NTC 194	Module Based Training
	UEENEEF004B	Electro Technology Based

**Cost**                      **\$70.00 + GST**

#### Code CH005      **Optical Fibre**

Mapped to	ICTTC 010D	Competency Based Training
	NUE 195	Module Based Training
	UEENEEF005B	Electro Technology Based

**Costs**                      **\$70.00 + GST**

#### Code CH006      **Coaxial Cabling**

Mapped to	ICTTC 011D	Competency Based Training
	NUE 194	Module Based Training

**Costs**                      **\$70.00 + GST**

#### Code CH007      **Combined Endorsement Manual**

Includes	ICTTC 009D Structured
	ICTTC 010D Optical
	ICTTC 011D Coaxial

**Costs**                      **\$180.00 + GST**





## Combined Telecommunications Manuals

Name	Open Registration plus Endorsements
Training Area	Electrical Apprentices / New entrants
Institution Type	TAFE – Electrical Training Colleges
Web – Based	Yes

### Material Available

#### Code CH008      **Open Registration + Structured Cabling**

Includes              Open Registration  
                             Structured Cabling

Costs                      **\$160.00 + GST**  
                                     **Includes Termination Tool and UTP Stripper**



#### Code CH009      **Open Registration + Structured / Coaxial Cabling & Optical Fibre**

Includes              Open Registration  
                             Structured Cabling  
                             Coaxial Endorsement  
                             Optical Fibre Endorsement

Costs                      **\$220.00 + GST**  
                                     **Includes Termination Tool and UTP Stripper**





## Aerial and Underground Endorsement

Name	Aerial / Underground Endorsements
Training Area	Electrical Apprentices / Open Registration Holders
Institution Type	TAFE – Electrical Training Colleges
Web – Based	Yes

### Material Available

#### Code CH010      **Underground Endorsement**

Mapped to	ICTTC 018D	Install Underground Enclosures
	ICTTC 019C	Install underground Cable

**Cost**                      **\$70.00 + GST**

#### Code CH011      **Aerial Endorsement**

Mapped to	ICTTC 016D	Joint Metallic conductor cable
	ICTTC 020D	Construct Aerial Cable Supports
	ICTTC 021D	Install Aerial Cable

**Costs**                      **\$70.00 + GST**

#### Code CH012      **Combined Aerial / Underground Manual**

Includes	ICTTC 018D	Install Underground Enclosures
	ICTTC 019C	Install underground Cable
	ICTTC 016D	Joint Metallic conductor cable
	ICTTC 020D	Construct Aerial Cable Supports
	ICTTC 021D	Install Aerial Cable

**Costs**                      **\$120.00 + GST**



**OH&S  
Hand and Power Tools  
Rectify Faults**

Name	Pre-Requisites
Training Area	Electrical Apprentices / New entrants
Institution Type	TAFE – Electrical Training Colleges
Web – Based	Yes

**Material Available**

**Code CH013**      **Occupational Health and safety**

Mapped to	ICTTC 170B	Occupational Health and Safety For the telecommunications technician
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**Cost**                      **\$70.00 + GST**



**Code CH014**      **Use hand and power tools**

Mapped to	ICTTC 140B	Hand and Power tools For the telecommunications technician
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**Cost**                      **\$70.00 + GST**



**Code CH015**      **Rectify faults and alter cabling systems**

Includes	ICTTC 015D	Locate and identify cable system faults
	ICTTC 157A	Locate and rectify digital reception equipment faults
	ICTTC 017C	Alter services to existing cable system

**Costs**                      **\$90.00 + GST**





## Cert II and III in Telecommunications

Name	Certificate II in Telecommunications
Training Area	Electrical Apprentices / New entrants
Institution Type	TAFE – Electrical Training Colleges
Web – Based	Yes

### Material Available

#### Code CH016 Certificate II in Telecommunications Cabling ICT 20308

Mapped to	ICTTC136D	Restricted Registration
	ICTTC 137D	Open Registrations
	ICTTC005C	Install cable support systems
	ICTTC006C	Place and secure cable
	ICTTC008C	Terminate metallic conductor cable
	ICTTC012C	Install functional and protective telecommunications earthing system
	ICTTC017D	Alter services to existing cable system



**Cost**                    **\$220.00 + GST**  
**Includes Termination Tool and UTP Stripper**

### Material Available

#### Code CH017 Certificate III in Telecommunications ICT 30208

Pre-Requisites	ICTTC170A	Follow OHS
	ICTTC140B	Use hand and power tools.
	ICTTC136C	ACMA Restricted Rule
	ICTTC137C	ACMA Open Rule
6 core units	ICTTC009D	Structured cabling
	ICTTC010D	Optical fibre cable
	ICTTC011D	Place, secure and terminate coaxial cable
	ICTTC015D	Locate and identify cable system faults
	ICTTC017D	Alter services to existing cable system
	ICTTC156A	Install digital reception equipment



**Cost**                    **\$220.00 + GST**  
**Includes Termination Tool and UTP Stripper**



## SMATV Digital Reception Technology

Name	Certificate II and III in Telecommunications DRT
Training Area	Electrical Apprentices / New entrants
Institution Type	TAFE – Electrical Training Colleges
Web – Based	Yes

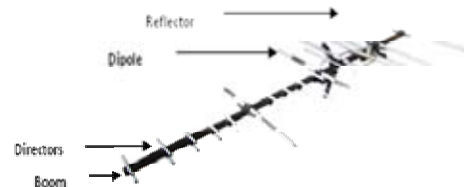


### Material Available

#### Code CH018 Certificate II ICT 20508 in Telecommunications Digital Reception Technology

ICTTC170A	Follow OHS and environmental policy and procedures
ICTTC140B	Use hand and power tools
ICTTC011D	Place, secure and terminate coaxial cable
ICTTC156A	Install digital reception equipment
ICTTC163A	Install a satellite system
ICTTC157A	Locate and rectify digital reception equipment faults
ICTTC053D	Train customers
ICTTC173A	Plan, organise and undertake work activities
ICTTC136C	Install, maintain and modify customer premises communications cabling: ACMA Restricted Rule
AUM 8011A	Provide customer service

**Cost** \$220.00 + GST



### Material Available

#### Code CH019 Certificate III ICT 30508 in Telecommunications Digital Reception Technology

ICTTC164A	Install a terrestrial antenna
ICTTC015D	Locate and identify cable system faults
ICTTC017D	Alter services to existing cable system
ICTTC095D	Conduct radio frequency measurements
ICTTC165A	Install a complex digital reception system
ICTTC162A	Install a cable lead in
ICTTC137C	Install, maintain and modify customer premises communications cabling: ACMA Open Rule

**Cost** \$220.00 + GST



## Cert II in Technical Security

Name	Certificate II in Technical Security
Training Area	Electrical Apprentices / New entrants
Institution Type	TAFE – Electrical Training Colleges
Web – Based	Yes



### Material Available

#### Code CH020      **Install a security alarm system**

includes	CPPSEC 2001A	Communicate effectively in the security industry
	CPPSEC 2002A	Follow workplace safety procedures in the security industry
	CPPSEC 2003A	Work effectively in the security industry
	CPPSEC 2020A	Provide technical security services to clients
	CPPSEC 2021A	Install security equipment and systems
	CPPSEC 2026A	Perform routine maintenance on security equipment and system

**Cost**                      **\$75.00 + GST**

#### Code CH021      **Install a CCTV system**

Mapped to	CPPSEC 2023A	Install CCTV equipment and system
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**Costs**                      **\$75.00 + GST**

#### Code CH022      **Combined/ Cert II in Technical Security CPP 20307**

Includes	ICTTC 136D	Restricted Registration
	CH015 (As Above)	Install a security alarm system
	CH014 (As Above)	Install CCTV equipment and system

**Costs**                      **\$160.00 + GST      (Saves \$47.00)**





## IP Networking

Name	Introduction to IP Networking
Training Area	Electrical Apprentices / Technicians
Institution Type	TAFE – Electrical Training Colleges – Private RTOs
Web – Based	Yes

### Material Available

**Code CH023**      **Introduction to IP Networking**

### Course Content

1. Network Fundamentals and Data Transmission
2. Understanding IP addressing and Subnet masks
3. Understanding DHCP and static IP addresses
4. Sharing Internet connections and basic networking
5. File and Print Sharing
6. Understanding Internet security
7. Setting up Wireless Networks
8. Understanding ADSL Circuits
9. Router Port forwarding for Security and CCTV applications
10. Hands on Router Configuration for ADSL services



**Cost**                      **\$80.00 + GST**

### Material Available

**Code CH024**      **IP Case for course delivery**

#### Includes

1. Hardened Pelican case
2. On Board wireless ADSL 4 port Router
3. Security system with an IP Interface
4. IP CCTV Camera
5. IP Print Server
6. IP controlled Relay Board
7. Selection of fans and LEDs for switched outputs
8. One point connection for power and data



**Cost**                      **\$2000.00 + GST**  
**Includes Delivery**



## Instructor's packs

Name                      Instructors packs  
 Training Area          Course Instructors  
 Institution Type        TAFE – Electrical Training Colleges – Private RTOs

### Material Available

Instructors packs include

- (1) Full Manual
- (2) Full PowerPoint Presentations
- (3) Sample Exam
- (4) Workbook Answers

**Course instructor's packs are available for the following:**

<b>Instructor's guides</b>	<b>Costs</b>
IM-CH 001 Restricted Registration	\$170.00
IM-CH 002 Res Registration + Upgrade to Open	\$230.00
IM-CH 003 Open Registration	\$230.00
IM-CH 004 Structured Cabling	\$170.00
IM-CH 005 Optical Fibre	\$170.00
IM-CH 006 Coaxial Cabling	\$170.00
IM-CH 007 Combined endorsements SCS+OF+ Coaxial	\$280.00
IM-CH 008 Open Registration + SCS	\$260.00
IM-CH 009 Open Registration + SCS + OF + Coaxial	\$320.00
IM-CH 010 Underground Cabling	\$170.00
IM-CH 011 Aerial Cabling	\$170.00
IM-CH 012 Combined Underground / Aerial	\$220.00
IM-CH 013 OH&S	\$170.00
IM-CH 014 Hand and Power Tools	\$170.00
IM-CH 015 Rectify faults and alter cabling systems	\$190.00
IM-CH 016 Cert II in Telecommunications Cabling	\$320.00
IM-CH 017 Cert III in Telecommunications	\$320.00
IM-CH 018 Cert II in Telecommunications DRT	\$320.00
IM-CH 019 Cert III in Telecommunications DRT	\$320.00
IM-CH 020 Technical Security	\$175.00
IM-CH 021 CCTV	\$175.00
IM-CH 022 Cert II in Technical Security	\$280.00
IM-CH 023 Introduction to IP Networking	\$180.00

**Note: With the first order of 12 Student Manuals  
 An instructor pack is issued Free of Charge.**



## How to Place an Order

For information relating to any of the mentioned resource material  
Or to receive a sample Kit Please contact

### Carl Holmes

Integracom Management Group

Tel: 08 9355 5770

Fax: 08 9355 5990

E mail: [carl@integracom.com.au](mailto:carl@integracom.com.au)

Web: [www.integracomtraining.com.au](http://www.integracomtraining.com.au)

Resource material can be ordered on line from our website at  
[www.integracomtraining.com.au](http://www.integracomtraining.com.au)

**Alternatively** resource material can be ordered through TITAB by visiting  
their Web site at [www.titab.com.au](http://www.titab.com.au) - Tab (Learner Resource)

Or contacting them on

Tel: 03 9349 4955

Fax: 03 9349 4844

Email: [info@titab.com.au](mailto:info@titab.com.au)



**Delivery cost**

**1-3 books**

**\$15.00 + GST**

**3 + books**

**\$45.00 + GST**

