School of Graduate Studies

Industrial Doctorate (IndD)
The AeU IndD is a professional doctorate, a industry-oriented alternative to a traditional PhD;

Whilst equivalent in status and challenges to a PhD, it is more appropriate for those pursuing professional rather than academic careers.

MQF Level 8
For whom?

- It is specifically designed for working adults whose contributions to the industry are of significance for the advancement of knowledge and skills to warrant for a doctorate qualification;

- The programme is more suited for candidates in the industrial and engineering field, technologists and scientists
What is the difference between academic doctorates (e.g. PhD) and professional doctorates (DBA, IndD)?

- All doctorates from AeU confer the title “Dr” on successful candidate.
- A PhD is a fully research based programme with no taught elements and is usually academic in nature. The final product of the PhD research is a thesis.
- A professional doctorate (e.g. DBA, IndD) is a programme of research, scholarship and advanced study which enables candidate to make significant contribution to knowledge and practice in their professional context. In doing so, a candidate may also contribute more generally to scholarship within the discipline or field study. The final product of IndD is a dissertation by portfolio.
Most local universities offer Industrial Doctorate to candidates whose research is a work (industrial)-based activity that culminates as a thesis whereas AeU’s IndD is also a work(industrial)-based doctorate but culminates as a dissertation by portfolio.

• Flexible, affordable and quality doctorate.
• No proposal is necessary at the point of entry.
• Candidate will be guided to prepare research proposal and the conduct of research by coursework, workshops, colloquia and clinics;
• Supervisors with both industrial and academic experiences.
• Fastest growing doctoral centre in Malaysia, over 500 students
What are IndD learning outcomes?

- To develop and apply knowledge, through original research and applications;
- To demonstrate a systematic acquisition and understanding of a substantive body of knowledge at the forefront of professional practice;
- To conceptualise, design and implement project(s) in the generation of new knowledge, and/or application(s);
- To apply research techniques in professional practice.
Entry qualifications for IndD?

- Possess a recognised Masters Degree in relevant fields OR
- Other equivalent qualifications recognized by AeU Senate.
• Normally 4 years as part-time mode
Audit Courses

- Research Methodology 1
- Research Methodology 2
- Business Strategy and Policy
- Strategic Marketing
What is dissertation by portfolio?

- IndD dissertation by portfolio contains: (i) a portfolio consisting a collection of documented evidence, and (ii) a dissertation or a linking paper of not exceeding 60K words.
The Portfolio normally comprises of the periodic reports; scientific papers and articles written/presented by the candidate; reports on research project or projects completed during the period of study; and other documents considered to support the submission (e.g. project plans, financial plans, staff appraisals, etc - in other words, any evidence that supports the candidate's case.
The dissertation is the linking paper that will create coherence in the portfolio.

Other possibilities to create coherence include short linking pieces between main items, some diagrammatic representation, development of themes through different items, or some combinations of these.

Thus, the academic rigour of the portfolio is largely dependent on its structure and dissertation (linking paper).
The IndD researcher might work within different paradigms or in different disciplines and so the research is likely to be drawn from a broad range of possible areas.

The strength of the linking paper lies in the underpinning theory and/or hypotheses.
I. The portfolio comprises: 1 paper on Bioinformatics, 1 paper on eLearning, 1 paper on Precision agriculture and 1 paper on Cyberspace Security

II. Choices of the linking paper:
   i. “ICT as enabler: Applications in Different Domains”
   ii. “Innovation Cross-Fields and Its Business Impact”
   iii. “Creating the ICT Sector for the Innovation Economy” Or more specific on the technology,
   iv. “Security Technology Cross-Fields”
   vi. “Random Number Generator for All Domains”

Then, to consider “what is the underlying theory and the hypotheses”
Timeline for IndD
(Normal Duration: 4 Years)

Year 1
1.1 Preparation of Intent of Research
1.2 Appointment of Supervisor
1.3 Attending audit courses
1.4 Presentation of 1st seminar as a Research Proposal
1.5 Submission of Final Research Proposal (inclusive of the stages of work to be completed)

Year 2
2.1 Submission of 1st Research Progress Report on stages of work completed
2.2 Submission of 2nd Research Progress Report on stages of work completed
2.3 Presentation of 2nd seminar on the up to date Research Progress
2.4 Initiation of Research Dissertation (inclusive of full literature review)
2.5 Submission of Research Dissertation for internal & external assessment for oral examination on Dissertation. A Pass is required before proceeding to the next stage

Year 3
3.1 Submission of 3rd progress report on stages of work completed
3.2 Presentation of 3rd seminar on the up to date Research Progress
3.3 Submission of 4th progress report on stages of work completed

Year 4
4.1 Submission of Dissertation by Portfolio
4.2 Nomination and Appointment of Portfolio Examiners
4.3 Recommendation of Portfolio Evaluation by Supervisor & Examiners
4.4 Portfolio Examination / Viva voce
4.5 Graduation
**Submission / Presentation of Research Proposal and Progress Reports**

1. **Presentations**
   At a number of stages, the candidate will be asked to make presentations of the work to the programme team and their peers. A clear view of:
   (i) why the project is chosen;
   (ii) what thesis(es) is/are being pursued, and
   (iii) where the ‘contribution to knowledge’ is likely to arise or will be expected.

2. **Progress Reports**
   - A record of progress towards the research on-going research objectives.
   - All reports should contain an updated project management plan to show how the candidate intends to reach the end goals.
   - The content of all reports and papers must be agreed with academic and industrial supervisors.
Submission of 3-month notice for submitting dissertation by portfolio

Examination: 2 external and 1 internal examiner(s)
What is an acceptable IndD dissertation by portfolio?

• Reflects international standards of academic rigour;
• Is oriented to applied research in the specified field; and
• Makes a contribution to the profession and/or professional practice.
What are the criteria, against which the IndD dissertation by portfolio is to be examined, include:

- completeness and quality of the portfolio
- significance of the research to the practice in the specified field, and the clarity with which it is stated;
- competence in identifying and reviewing relevant literature(s);
- adequacy of developing research question(s);
- quality of basic research design(s): plausibility, parsimony and elegance;
- appropriateness of identification, collection and analysis of relevant evidences;
- expertise with which findings are interpreted in terms of theory, implications for policy and practice, and needs for further research; and
- quality and clarity of writing and presentation for relevant audiences.

The candidate must pass the dissertation (or linking paper) in order to be awarded the Industrial Doctorate.
THANK YOU

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Dean, SGS