

FACULTY OF ECONOMIC SCIENCES AND IT

# Centre for Applied Risk Management

## Annual Report 2016

Report number: UARM17d0002

Date: 31 March 2017

Prepared by: Neels Erasmus & Hermien Zaaiman

## Approval Sheet

**Title:** Centre for Applied Risk Management Annual Report 2016

**Synopsis:** The report provides a retrospective view of the activities undertaken and outputs delivered by UARM during 2016, as well as a forward view of the road ahead.

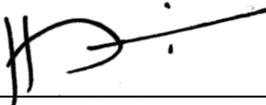
**Client:** NWU Internal

**Document nr:** UARM17d0002

**Date:** 31 March 2017

**Classification:** Restricted

**Prepared by:** Neels Erasmus & Hermien Zaaiman

**Approved by:**   
\_\_\_\_\_  
Prof Hermien Zaaiman, Manager Centre for Applied Risk Management

### Note on report coverage:

This report covers all the activities of the centre that took place during 2016, with the exception of the Class of 2016 Graduate Symposium and Graduation, which occurred in 2017. The date of the report is 31 March, being the date on which the results of the Class of 2016 were finalised.

## Distribution Sheet

- NWU Institutional Management
- Prof Linda du Plessis, Campus Rector: Vaal Triangle Campus
- Prof Herman van der Merwe, Deputy Dean: Faculty of Economic and Management Sciences, Vaal Triangle Campus
- Prof Babs Surujlal, Director Research Development: Faculty of Economic and Management Sciences, Vaal Triangle Campus
- Prof Wynand Grobler, Director: School of Economic Sciences, Faculty of Economic and Management Sciences, Vaal Triangle Campus
- Prof Heleen Janse van Vuuren, Director, School of Accounting, Vaal Triangle Campus
- Prof Sonia Swanepoel, Executive Dean: Faculty of Economic and Management Sciences, Mafikeng Campus
- Prof Susan Visser, Deputy Dean: Faculty of Economic and Management Sciences, Potchefstroom Campus
- Prof Ntebo Moroke, Deputy Dean (Acting): Faculty of Economic and Management Sciences, Mafikeng Campus
- Prof Pieter Buys, Director: WorkWell: Research Unit for Economic and Management Sciences, Potchefstroom Campus
- Prof Waldo Krugell, Director: School of Economics, Faculty of Economic and Management Sciences, Potchefstroom Campus
- Prof Eno Ebenso, Executive Dean: Faculty of Natural and Agricultural Science, Mafikeng/Vaal Triangle Campus
- Prof Magda Huisman, Research Director: Unit for Business Mathematics and Informatics, Potchefstroom Campus
- Prof Riaan de Jongh, Director: Centre for Business Mathematics and Informatics, Potchefstroom Campus
- UARM Team
- UARM Library

## Table of Contents

1. Executive Summary .....	1
2. Introduction .....	3
3. Staff Profile.....	4
4. Teaching Profile (Students) .....	5
5. Training Profile (Dissertations).....	14
6. Research Profile.....	15
7. Income .....	16
8. Highlights .....	18
9. Challenges .....	18
10. The Road Ahead.....	19

## Appendices

- A: UARM Research Focus 2016
- B: External Collaborative Networks
- C: Previous Student Comments
- D: Photo Gallery

## 1. Executive Summary

The Centre for Applied Risk Management (UARM) was established in June 2012 at the Vaal Triangle Campus of the North-West University. UARM's main aims are postgraduate teaching at master's and PhD levels, groundbreaking qualitative research in applied risk management with behavioural risk management as specific research focus, as well as developing qualitative risk tools that can be used in practice.

### Staff Profile

In 2016, the Centre had three full-time permanent, one part-time permanent, two contracted academic staff members and one shared administrative assistant. We also had two extra-ordinary professors from the Vrije Universiteit in Amsterdam. Major changes with respect to 2015 were:

- Mr Henry Cockeran moved to the School of Economic Sciences on 1 Feb 2016
- Appointed Mr Emmanuel Mulambaya as Lecturer on a full-time basis from 1 June 2016 (previously from Sasol Safety, Health & Environmental Risk)
- Expanded Dr Neels Erasmus' role to that of UARM Operations Manager.

### Teaching Profile (Students)

M1 first year students 2016: Nine students enrolled as first years in the masters programme in 2016, of which one cancelled during the course of the year.

M2 second year students 2016: Eight second year students enrolled for the second year of the masters. Three of these were historically 3<sup>rd</sup> year students who had not yet completed their mini-dissertations.

The total number of registered UARM masters students in 2016 was therefore 16. The following is a summary of this student body in 2016 compared to 2015<sup>1</sup>:

- The ACIW (African/Coloured/Indian/White) breakdown of the 16 students was 4/2/4/6 (5/2/5/5 in 2015)
- Gender: 6 out of 16 = 37% students were female (6 out of 17 = 35% in 2015)
- The average age for master's students in 2016 was 39 years, varying between 23 and 51 years (39 years in 2015, varying between 23 and 53)
- Seven 2016 second year master's students graduated, with 3 achieving the degree with distinction (7 in 2015, with 4 distinctions)

### Training Profile (Dissertations)

Of the eight active second year master's students in 2016, seven completed their mini-dissertations and fulfilled all the requirements for the MCom degree in Applied Risk Management. The total minimum duration

---

<sup>1</sup> Note that because we incorporate the total student body, this does result in a degree of double counting in the comparisons with respect to the previous year because the same people that were included in the first year may be again included in the second year. This should however not materially impact the general trends.

throughput rate for the programme (% of candidates completing the qualification in two years), is 60%. The total throughput rate for the programme (% of enrolled students that have graduated), is 70%.

#### Research Profile

The behavioural risk research focus of the Centre was redefined in 2016 to primarily focus on “Risk Culture”, with “Understanding of Risk” and “Risk Stakeholder Personality” as sub-foci. The seven masters level mini-dissertations that were completed in 2016 all fall within this area and four of these are expected to lead to publications in 2017 (they were all written in article format). Higher education risk was the other active research area in UARM during 2016.

#### Centre Income

The total fee and subsidy income generated by the Centre since 2012 is R2.7m, of which R1m was generated in 2016.

#### Centre Highlights

The top achievement for UARM is the delivery in 2016 of another seven masters graduates, with three distinctions in the degree. Also noteworthy is the SAQA registration of the Masters in Applied Risk Management qualification, and the excellent progress that was made with the development and bedding down of our RCQ (Risk Culture Questionnaire).

#### Centre Challenges

The biggest frustration is the little time that UARM team members have for their own research, given the teaching load. The other significant loss for the Centre was the unexpected passing away of Prof Michael Damm in December 2016 after his cancer returned.

#### The Road Ahead

Going forward, the main focus for the Centre will be to start generating academic publications, both from the MCom mini-dissertations and its own research projects. A second priority is the further development of the RCQ with the view to also generate research-based consulting income.

## 2. Introduction

The Centre Applied Risk Management (UARM) was established in June 2012 at the Vaal Triangle Campus of the North-West University, with the aim of doing postgraduate training and research on risk management as an applied discipline. The applied approach includes qualitative risk education and training at masters and PhD levels and risk-specific collaborative research projects, with a specific focus on behavioural risk management and more specifically, risk culture. The two-year part-time master's degree is a taught programme with main aim to satisfy the need of full-time employees across the public and private sectors. The Centre's qualitative approach to risk management was intended to fill the gap created by the dominance of quantitative risk management on the tertiary level.

The remainder of this report is structured as follows. The next section provides a summary of the personnel (full-time and part-time/contract) involved in UARM in 2016. This is followed by Section 4 which contains graphs and tables summarising the training profile of the Centre from the perspective of the student body and in Section 5 from the perspective of the corresponding master's dissertations and PhD theses produced. Section 6 provides an overview of the research profile of the Centre including published research and research in progress. Section 7 summarises income generated from study fees and subsidies. This is followed in Section 8 with an overview of UARM's highlights during 2016, which is then juxtaposed with the challenges experienced in Section 9. The report is concluded in Section 10 with an overview of the road ahead. Appendix A discusses the rationale behind the redefines UARM research focus that was implemented in 2016, followed by Appendix B that contains a summary of the external industry and academic collaborative networks that the Centre has formed in support of its mission. Appendix C provides some photos of notable events that took place during the year, and Appendix D finally provides student comments.

### 3. Staff Profile

The Centre has a small team of full-time staff members and part-time contributors and/or contractors to the programme. This has changed over time – Table 1 provides a summary of the status as at the end of 2016.

**Table 1: UARM Staff Overview**

Name	Roles/Responsibilities	Comments
Prof Hermien Zaaiman	<ul style="list-style-type: none"> <li>• Full-time Associate Professor</li> <li>• UARM Manager</li> <li>• MCom Leader (taught three modules)</li> <li>• UARM Research Leader</li> <li>• Ad hoc Workshop Facilitator</li> </ul>	
Mr Fred Goede	<ul style="list-style-type: none"> <li>• Full-time Senior Lecturer</li> <li>• MCom Leader (teaching two modules)</li> <li>• Mini-dissertation supervisor</li> <li>• Researcher</li> <li>• Workshop Facilitator</li> </ul>	Potential PhD student, supervisor dr.ir. Gert Jan Hofstede, Wageningen University. Expects to register in 2018.
Dr Sonja Gilliland	<ul style="list-style-type: none"> <li>• Part-time Senior Lecturer</li> <li>• MCom Leader (mini-dissertation supervisor)</li> <li>• Researcher</li> </ul>	Part-time role in UARM; Subject Head of IT in the School of IT
Mr Emmanuel Mulambaya	<ul style="list-style-type: none"> <li>• Full-time Lecturer from 1 Jun 2016</li> <li>• MCom Leader (assisting with teaching one module)</li> <li>• Mini-dissertation supervisor</li> <li>• Researcher</li> </ul>	Potential PhD student – expects to register in 2018.
Ms Hedre Pretorius	<ul style="list-style-type: none"> <li>• Full-time lecturer up to middle of 2015</li> <li>• Part-time Consultant</li> <li>• Lecturer in master's programme</li> <li>• Co-Supervisor for M Dissertations</li> <li>• Co-Researcher on research projects</li> <li>• Data analysis on master's dissertations and research projects</li> </ul>	Employed by XDS
Dr Neels Erasmus	<ul style="list-style-type: none"> <li>• Part-time Consultant: UARM Ops Manager</li> <li>• Networking with industry and research institutions on research initiatives</li> <li>• Obtaining skills and financing for collaborative research projects</li> <li>• Contribute to teaching in the UARM modules – Statistics workshops for M1 and M2 students.</li> <li>• Examination of mini-dissertation projects</li> </ul>	Extra-ordinary Professor (NWU Potch Campus Faculty of Science)
Ms Helei Jooste	<ul style="list-style-type: none"> <li>• Administrative Staff</li> <li>• Part-time UARM Administrative Assistant</li> </ul>	
Prof Theo Kocken	Extra-ordinary professor Vrije Universiteit Amsterdam	
Prof Michael Damm	Extra-ordinary professor Vrije Universiteit Amsterdam	Passed away 30 Dec 2016

#### 4. Teaching Profile (Students)

Figure 1 shows the profile of the active master's students since 2014, namely 10 in 2014, 17 in 2015 (of which 7 were new first years), and 16 in 2016

The PhD student moved to a new promoter in the School of Economic Sciences by end 2015.

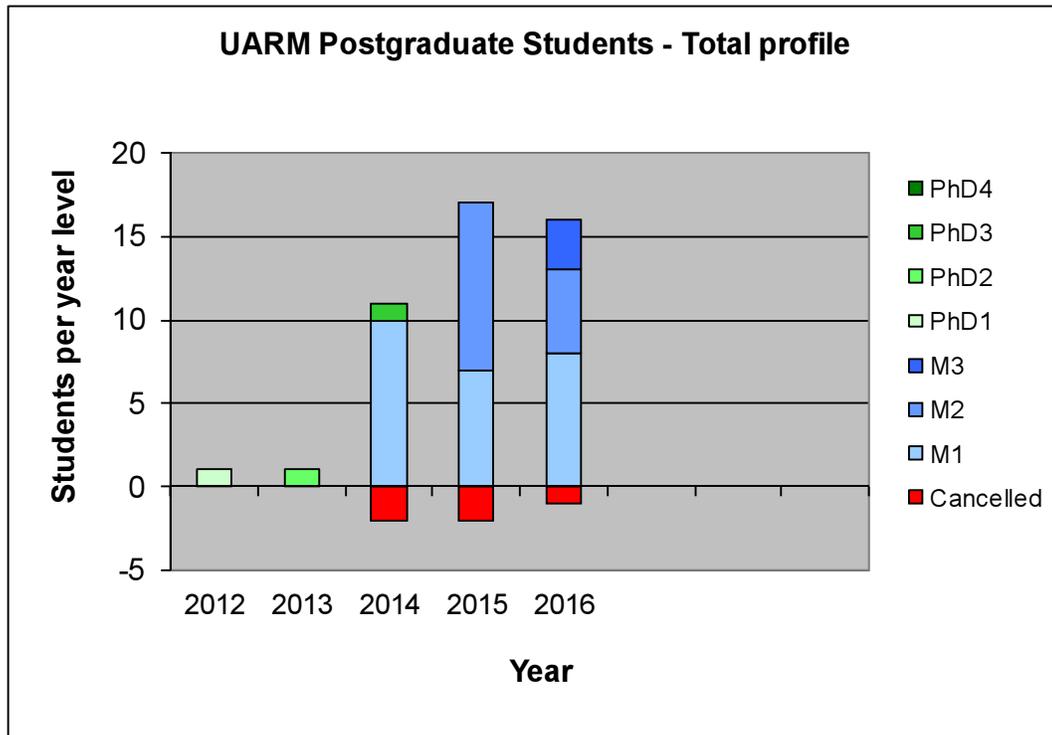


Figure 1

Cancelled		UARM Postgraduate Students							Total
M+PhD	Qualification + Historic Year	M1	M2	M3	PhD1	PhD2	PhD3	PhD4	
0	2012	0	0	0	1	0	0	0	1
0	2013	0	0	0	0	1	0	0	1
-2	2014	10	0	0	0	0	1	0	11
-2	2015	7	10	0	0	0	0	0	17
-1	2016	8	5	3	0	0	0	0	16

Figure 2a and 2b show the race profile (broken down into African/Coloured/Indian/White) of the active students, both over time (Figure 2a) as well as for 2016 only (Figure 2b), with the latter broken down per qualification year. Figure 2c shows the A/C/I/W split for all the UARM graduands up to and including 2016.

**Total per year**

	A	C	I	W	Tot
2012	0	0	0	1	1
2013	0	0	0	1	1
2014	2	2	5	2	11
2015	5	2	5	5	17
2016	4	2	4	6	16
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	0

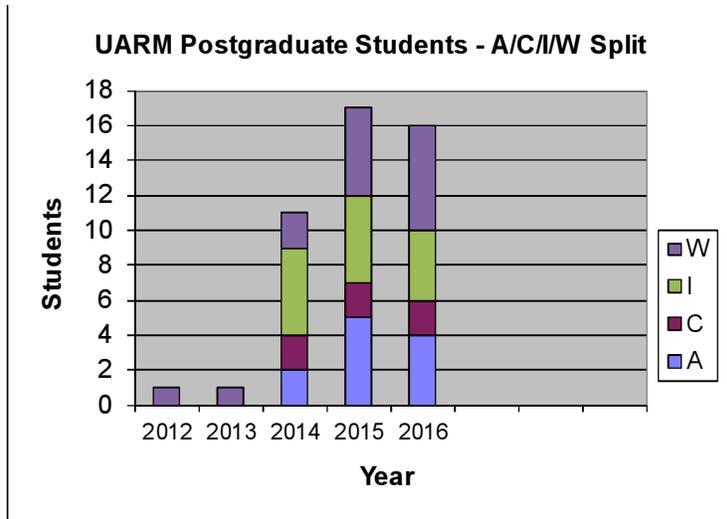


Figure 2a

**2016 Students per Qual**

	A	C	I	W	Tot
MFirst	3	1	2	2	8
MScnd	1	1	2	4	8
PhD	0	0	0	0	0
<b>Total:</b>	<b>4</b>	<b>2</b>	<b>4</b>	<b>6</b>	<b>16</b>

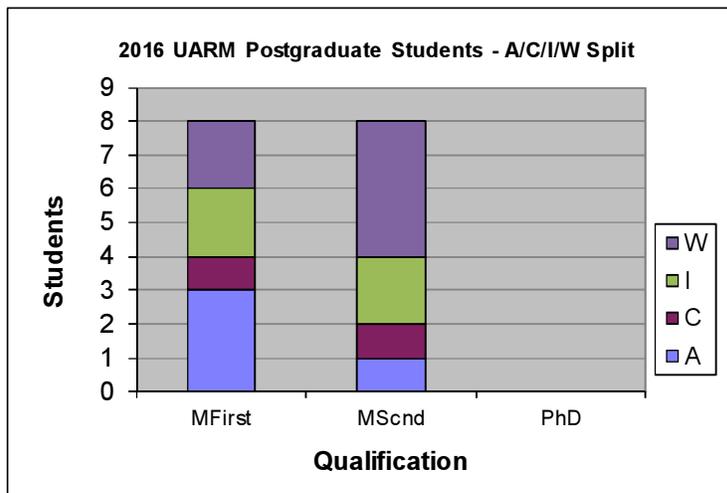


Figure 2b

**Total per A/C/I/W Category**

A	C	I	W	Tot
3	1	5	5	14

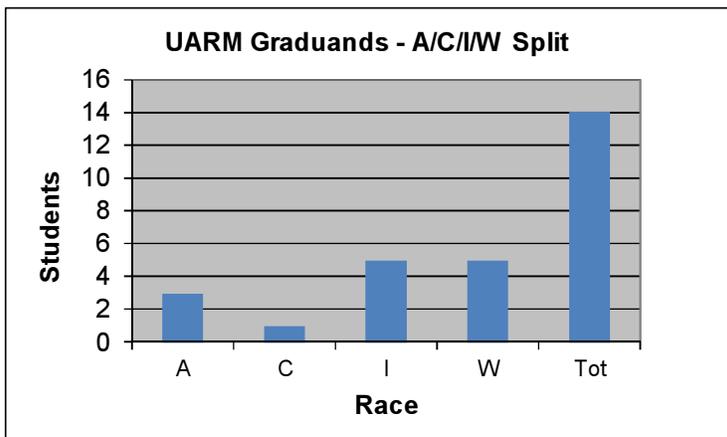


Figure 2c

Figure 3a and 3b show the Male/Female profile of the active students, both over time (Figure 3a) as well as for 2016 only (Figure 3b), with the latter broken down per qualification year. Figure 3c shows the Male/Female split for all the UARM graduands up to and including 2016.

	Total		
	M	F	Tot
2012	0	1	1
2013	0	1	1
2014	8	3	11
2015	11	6	17
2016	10	6	16
	0	0	0
	0	0	0
	0	0	0

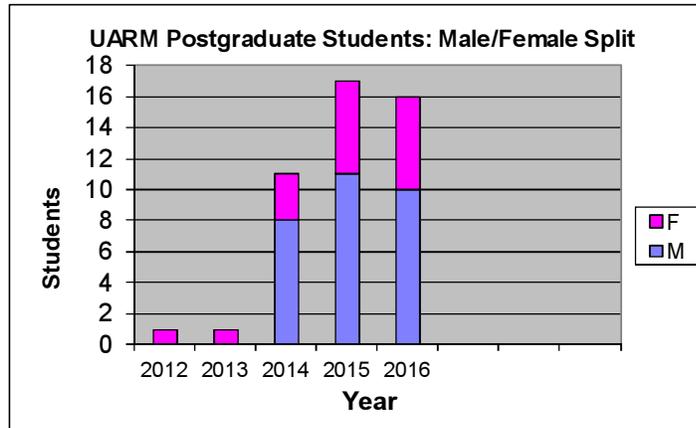


Figure 3a

	2016 Students per Qual		
	M	F	Tot
MFirst	5	3	8
MScnd	5	3	8
PhD	0	0	0
Total:	10	6	16

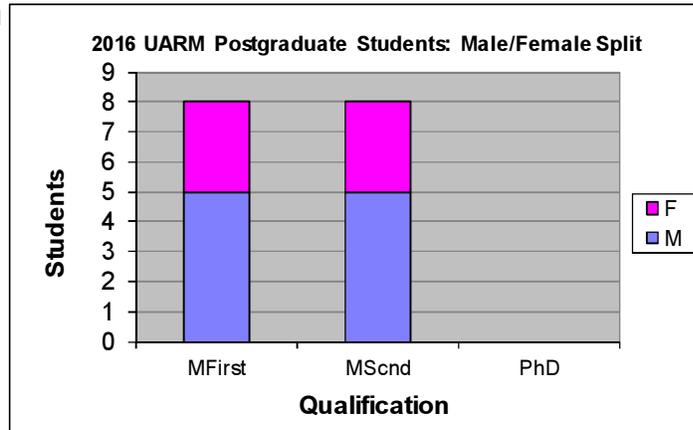


Figure 3b

	Total per Gender		
	M	F	Tot
	9	5	14

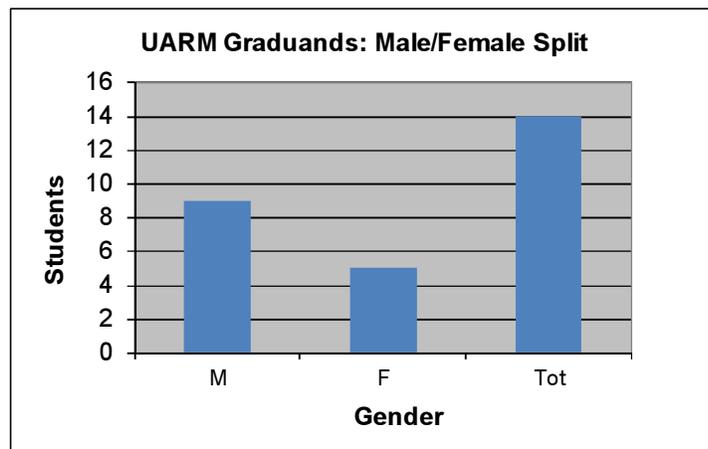


Figure 3c

Figure 4a shows the age profile of the active new intake master’s students over time, with the age taken as the candidate’s age at the start of the year when he/she first enrolled for the master degree. The graph is a so-called “box and whiskers plot”, which summarises the underlying distribution by using the minimum, first quartile, median, third quartile and maximum values.

It is apparent that there has been a significant downward shift in the 2016 distribution compared to the previous years.

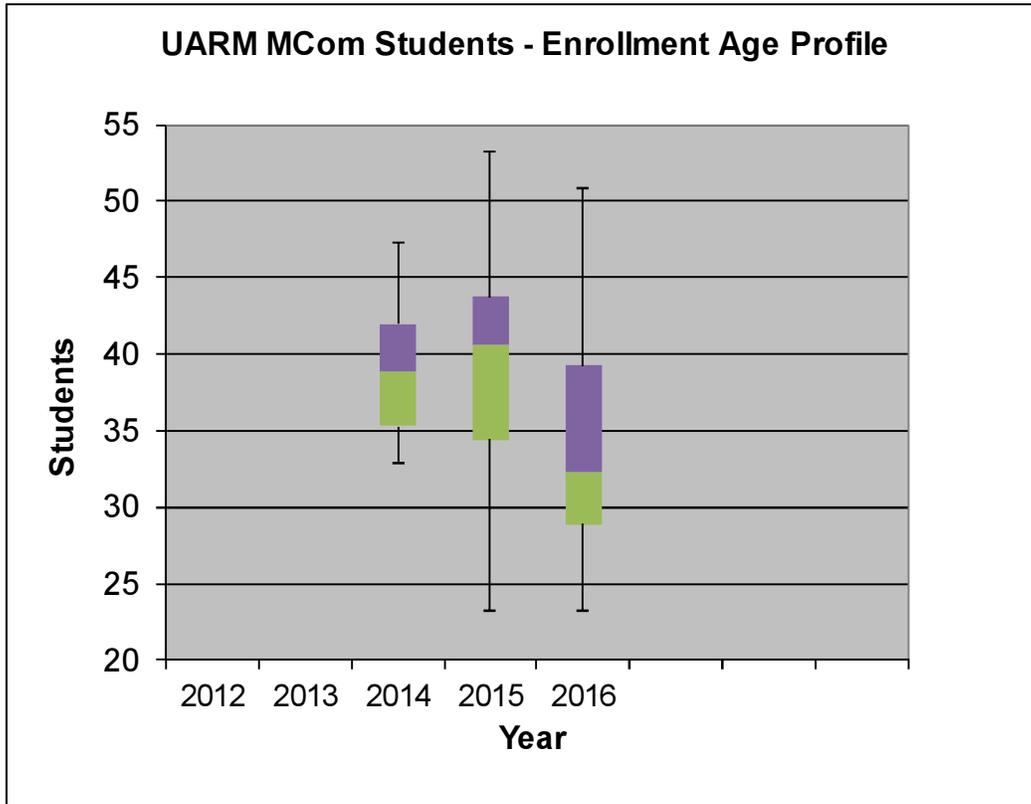


Figure 4a

### UARM MCom Students

Age of new intake at start of first year of enrolment

	2012	2013	2014	2015	2016			
<b>#Students:</b>	0	0	10	7	8	0	0	0
<b>Mean:</b>	-	-	39.3	39.1	34.1	-	-	-
<b>Minimum:</b>	-	-	32.9	23.3	23.2	-	-	-
<b>Q1:</b>	-	-	35.3	34.4	28.9	-	-	-
<b>Median:</b>	-	-	38.8	40.6	32.2	-	-	-
<b>Q3:</b>	-	-	42.0	43.8	39.3	-	-	-
<b>Maximum:</b>	-	-	47.3	53.3	50.8	-	-	-

Figure 4b similarly uses a box and whiskers plot to show the enrolment age profile of the masters graduands up to and including 2016. This graph shows that 75% of our 14 masters graduands were between 35 and 43 years of age when they first enrolled, with a median age of 40.

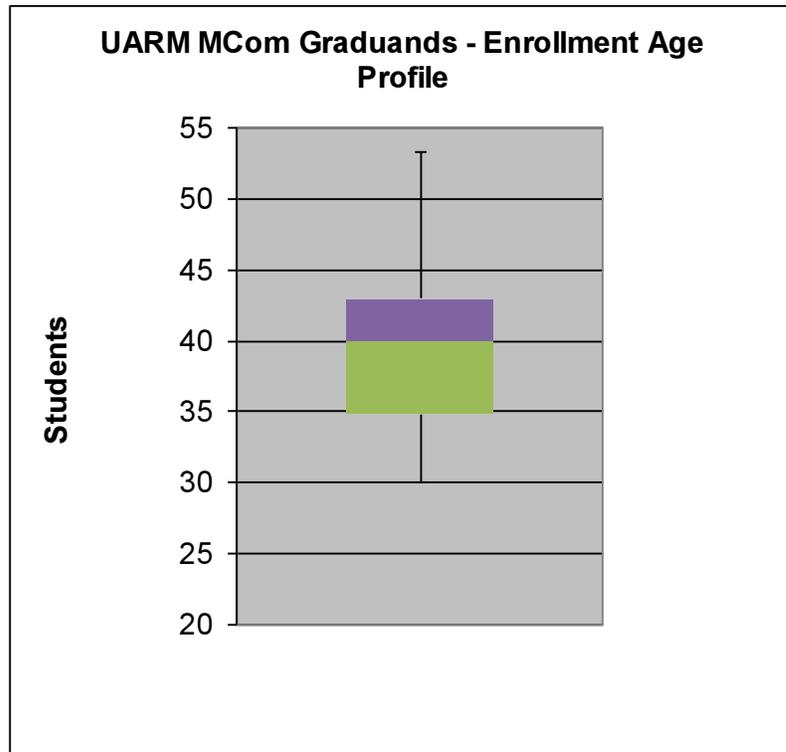


Figure 4b

**UARM MCom Students**  
 Graduand age at start of first year of enrolment

#Students:	14
Mean:	39.8
Minimum:	30.0
Q1:	34.8
Median:	40.0
Q3:	42.9
Maximum:	53.3

Figure 5a shows the profile of the number of master’s and PhD graduates over time, Figure 5b the module marks profile for the 2016 master’s graduates and Figure 5c the average marks for the modules over time.

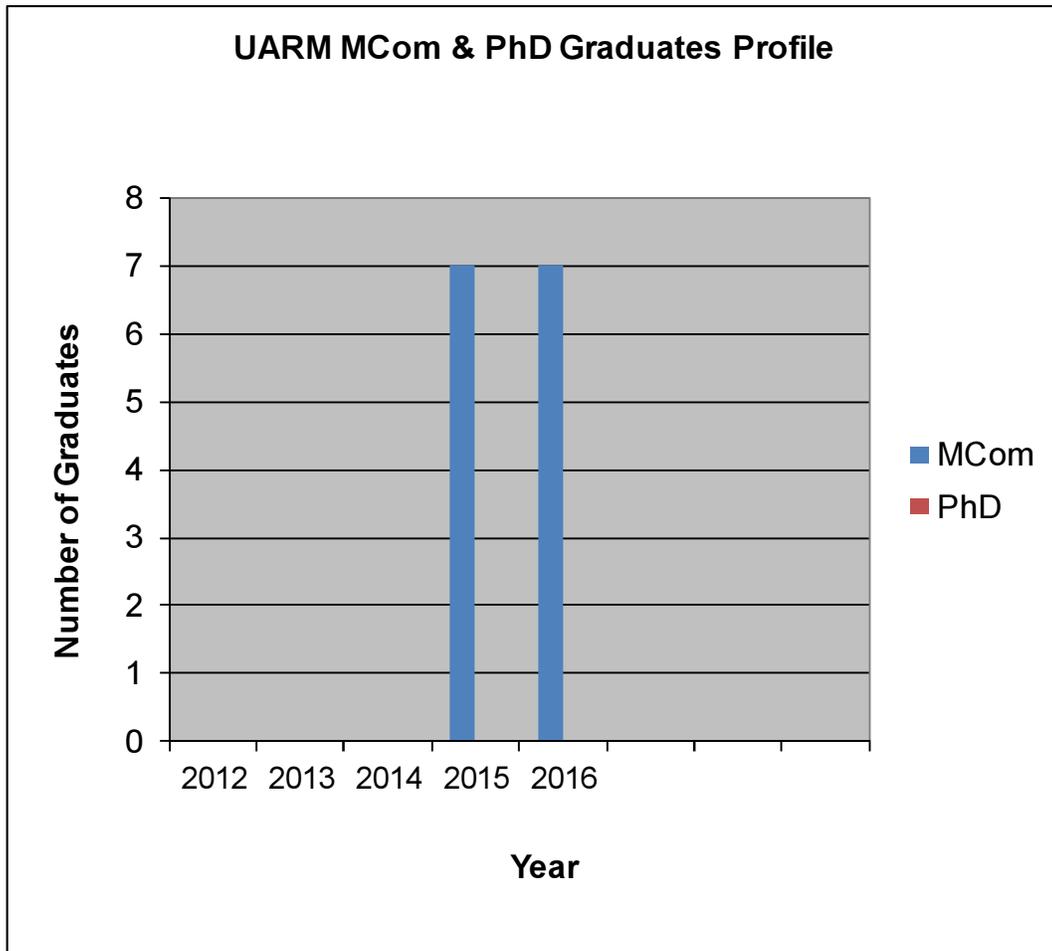


Figure 5a

### UARM MCom and PhD Graduates

	2012	2013	2014	2015	2016			
# MCom Grads	0	0	0	7	7	0	0	0
# PhD Grads	0	0	0	0	0	0	0	0

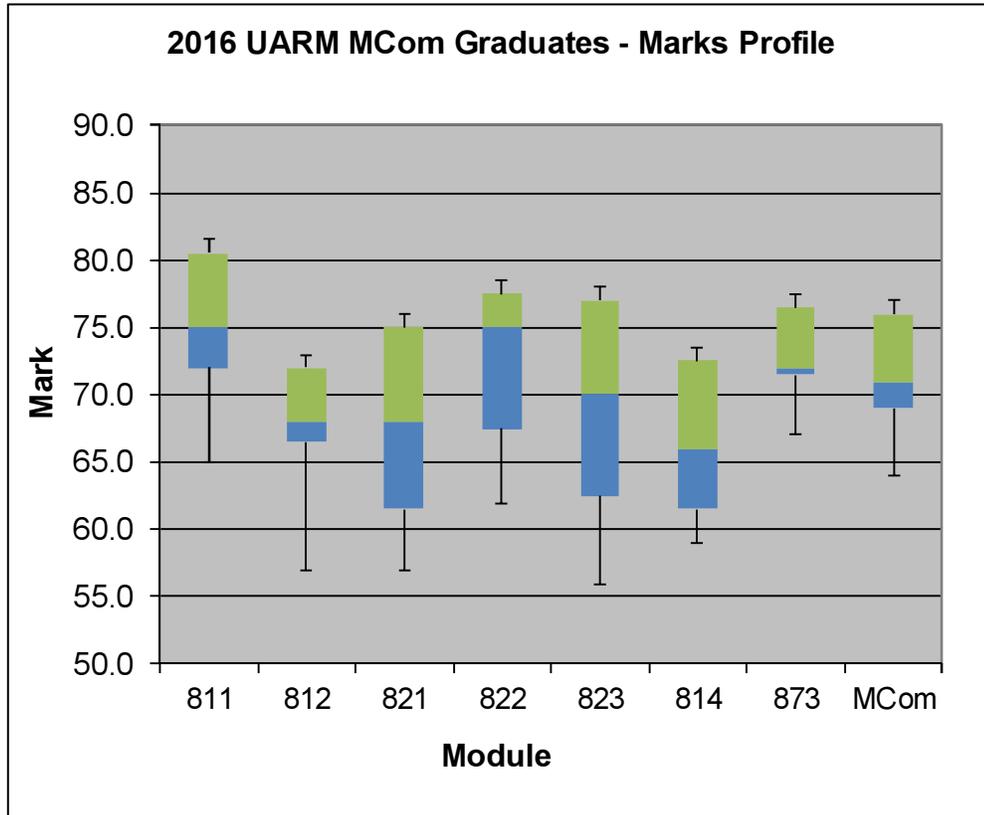


Figure 5b

### 2016 UARM MCom Graduates - Marks Profile

Module number - UARM:

	811	812	821	822	823	814	873	MCom
#Students	7	7	7	7	7	7	7	7
#Distinctions:	4	2	2	4	3	1	3	3
Mean:	76.0	68.4	68.4	72.4	69.7	67.7	73.7	71.9
Minimum:	65.0	57.0	57.0	62.0	56.0	59.0	67.0	64.0
Q1:	72.0	66.5	61.5	67.5	62.5	61.5	71.5	69.0
Median:	75.0	68.0	68.0	75.0	70.0	66.0	72.0	71.0
Q3:	80.5	72.0	75.0	77.5	77.0	72.5	76.5	76.0
Maximum:	87.0	77.0	81.0	80.0	83.0	81.0	81.0	78.0

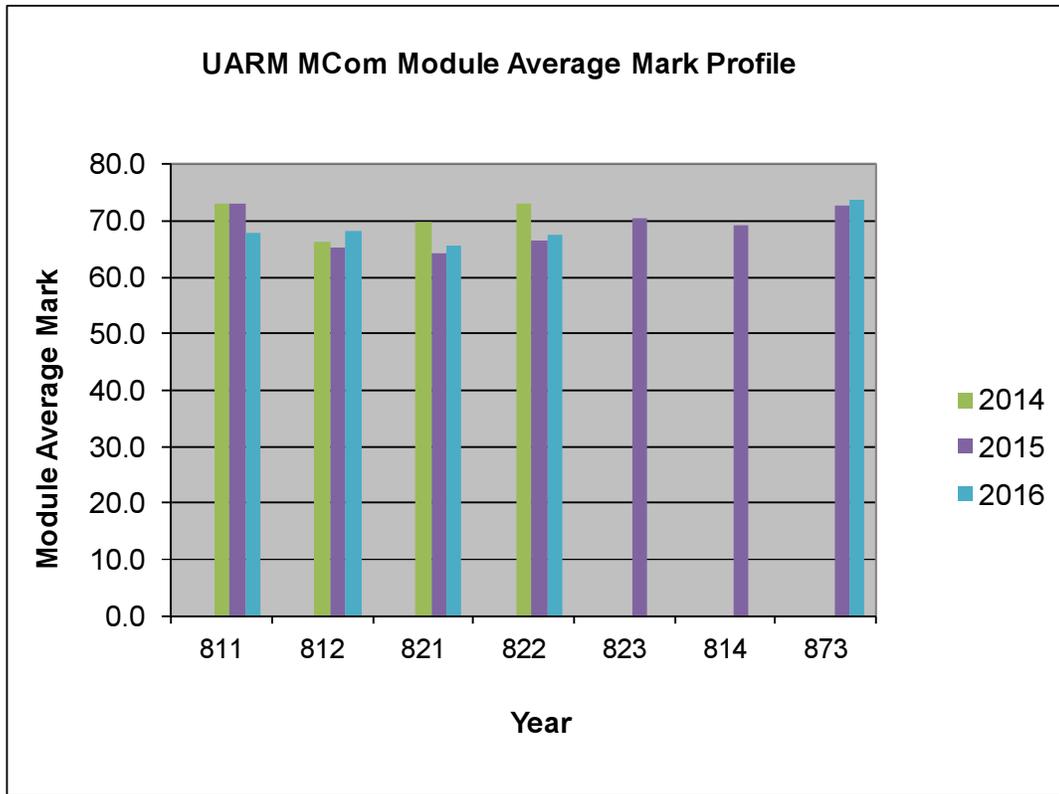


Figure 5c

**UARM MCom Average Marks per Module**

	2012	2013	2014	2015	2016		
811			73.2	73.1	67.8		
812			66.1	65.4	68.3		
821			69.7	64.4	65.6		
822			73.0	66.6	67.6		
823				70.4			
814				69.3			
873				72.7	73.7		

Note that the marks for the 823 and 814 modules for 2016 will only reflect in 2017, as a result of the transition arrangement from the MCom Finance and Risk Management to the MCom in Applied Risk Management.

Figure 6 shows the throughput stats profile of the master’s graduates over time, measured with respect to their first year of enrolment. Of the 12 that enrolled in 2014, 7 (58%) graduated within the prescribed two years and a further 2 (17%) took three years to graduate. The remaining three have not graduated and we have no knowledge of their intentions – they may well re-join the programme in future, which means that the split between the “> 3 Years” and “Not graduated” categories may still change in future.

Of the 8 students that enrolled in 2015, 5 (63%) graduated in the prescribed two years. The throughput for 3 years is obviously not yet available at this time, so the remaining 3 (38%) are all classified as “Not graduated”

From the above discussion it is clear that the critical measure of throughput that remains stable over time, is the percentage graduated within 2 Years, which can be seen to be 60% overall, over the duration of the programme. In addition, the table shows that, in total, 70% of the enrolled students graduated from the programme.

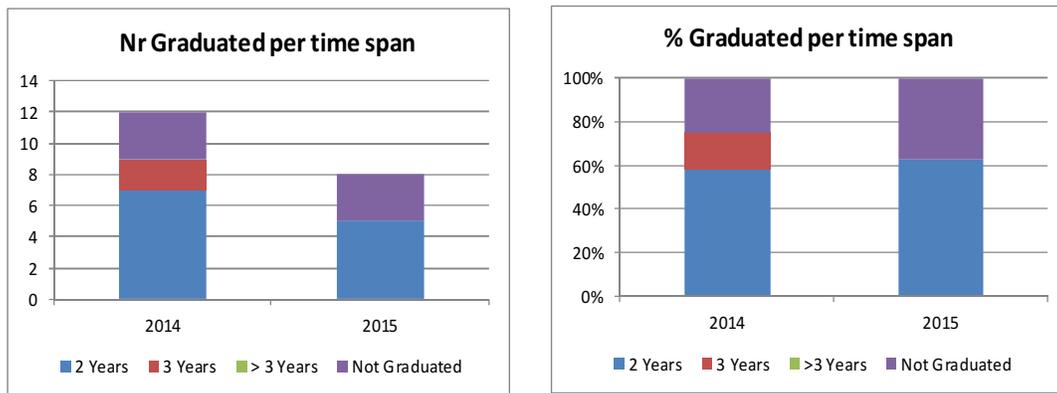


Figure 6a

Year first Enrolled	Number Enrolled	Nr graduated per time span			Total Graduated	Total not Graduated	% Graduated per time span			Total % Graduated	Total % not Graduated
		2 Years	3 Years	>3 Years			2 Years	3 Years	>3 Years		
2014	12	7	2		9	3	58%	17%		75%	25%
2015	8	5	n/a	n/a	5	3	63%	n/a	n/a	63%	38%
<b>Total:</b>	<b>20</b>	<b>12</b>	<b>2</b>	<b>0</b>	<b>14</b>	<b>6</b>	<b>60%</b>			<b>70%</b>	

## 5. Training Profile (Dissertations)

Of the 8 active second year master's students in 2016, seven completed their mini-dissertations and fulfilled all the requirements for the MCom degree in Applied Risk Management.

**Table 2: Completed Mini-Dissertations**

Document Nr	Mini-Dissertation/Thesis Title	Student	Supervisor
UARM16a0008	Key risk indicators and risk culture in a South African insurance organisation <a href="http://hdl.handle.net/10394/24945">http://hdl.handle.net/10394/24945</a>	Bezuidenhout, Christine	Mr Fred Goede
UARM16a0010	A risk culture comparison between risk practitioners and business managers <a href="http://hdl.handle.net/10394/24939">http://hdl.handle.net/10394/24939</a>	Harding, Ane-a	Dr Sonja Gilliland
UARM16a0010	Risk culture in card payment acceptance: a case study <a href="http://hdl.handle.net/10394/24940">http://hdl.handle.net/10394/24940</a>	Kalima, David	Prof Hermien Zaaiman
UARM16a0011	Risk attitude and risk culture in a South African logistics organisation <a href="http://hdl.handle.net/10394/24941">http://hdl.handle.net/10394/24941</a>	Lindeque, Eddie	Mr Fred Goede
UARM16a0012	Risk culture at senior and middle management level: a telecommunications case study <a href="http://hdl.handle.net/10394/24943">http://hdl.handle.net/10394/24943</a>	Meiring, Wilna	Prof Hermien Zaaiman
UARM16a0013	Stakeholder perception of risk tone in an insurance company <a href="http://hdl.handle.net/10394/24944">http://hdl.handle.net/10394/24944</a>	Naicker, Vasie	Prof Hermien Zaaiman
UARM16a0014	Risk culture assessment of a financial services organisation <a href="http://hdl.handle.net/10394/24946">http://hdl.handle.net/10394/24946</a>	Padayachee, Kishen	Mr Fred Goede

The structured format of the document number UARMyyxnnnn is as follows:

yy = year of publication / complying with the requirements for the degree (15, 16, ...)

x = series code

a = mini-dissertations;

b = PhD theses;

c = internal UARM research reports;

d = Management reports;

e = Consultation reports

nnnn = sequence number, unique per series code (i.e. it does not reset per year)

0000-0999 = unclassified documents

9000-9999 = classified documents

## 6. Research Profile

The research focus for the Centre was defined as “Behavioural Risk”, consisting of the dominant theme of “Risk Culture” with two underlying sub-themes “Understanding of Risk” and “Understanding of risk stakeholders”. More detail on the rationale underlying this research focus can be found in Appendix A.

In 2016, the master’s mini-dissertations as well as the internal research projects were all chosen to focus on assessing the risk culture within the candidate’s organisation.

The mini-dissertations were delivered in article format with an expectation that these could lead to publication upon completion of the studies. The expectation of students being able to produce publication ready articles within nine months of doing and writing up research proved to be unrealistic. The dissertations have to be reworked for submission for publication in accredited journals. This has resulted in a revised expectation that only the best master’s articles will be reworked and submitted for publication.

Table 3 provides a summary of the 2016 staff research and management projects in the Centre. Two of these (numbers 10220 and 10230) have resulted in published internal reports.

**Table 3: UARM Projects in 2016**

SeqNr	DocNr/Author	Title/ Description	Collaborators
10011		Higher Education Risk Culture	Zaaiman, H (Hermien); Ntema, P (Piet)
10021		Strategic Risk Management and Understanding of Risk at Board and Executive Level	Zaaiman, H (Hermien)
10041		Strategic Change Risk – Human factors affecting implementation of business change processes	Gilliland, S (Sonja)
10220	UARM16c0001	Proceedings of the UARM 2015 Masters Graduate Student Symposium	2015 Masters Graduate Students
10230	UARM16d0001	Centre for Applied Risk Management Annual Report 2015	Erasmus, CM (Neels); Zaaiman, H (Hermien)

## 7. Income

Figure 7 below shows the income generated by the Centre for masters and PhD students, broken down into registration fees, study fees, input subsidy and output subsidy. The total for 2016 amounted to R1.0m, with the cumulative since inception equal to R2.7m. Note that the input and output subsidies apply with a two year lag, i.e. we will receive the input subsidies for the 2015 intake in 2017.

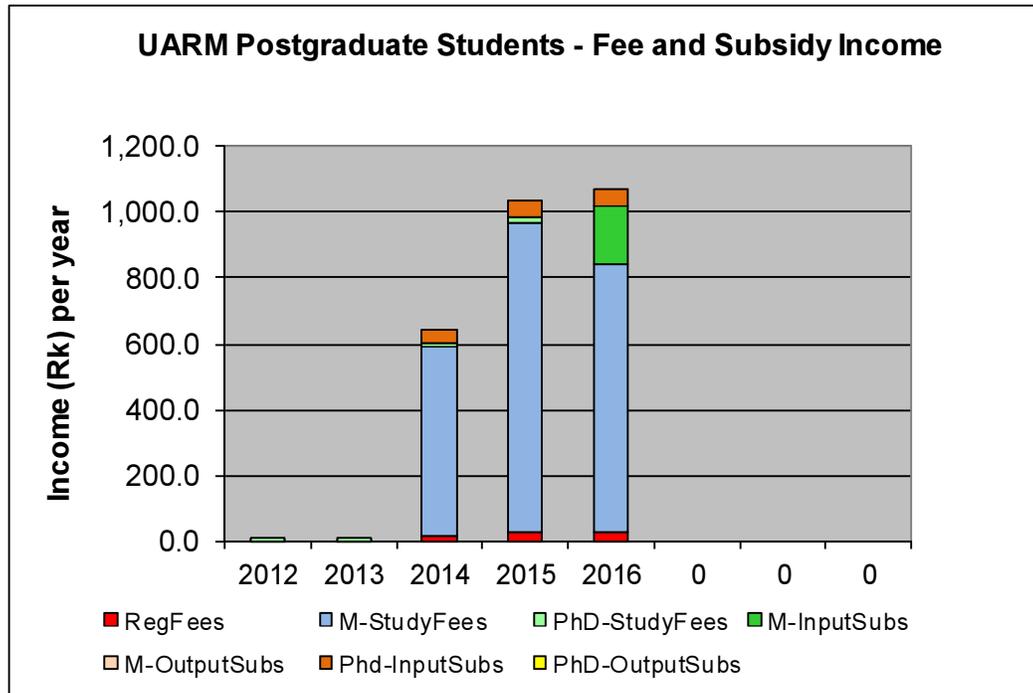


Figure 7

### UARM Postgraduate Students Income (Rk)

	Reg Fees	MCom Study Fees	PhD Study Fees	MCom Input Subs	MCom Output Subs	PhD Input Subs	PhD Output Subs	Total
2012	1.1	0.0	9.6	0.0	0.0	0.0	0.0	9.6
2013	1.2	0.0	11.6	0.0	0.0	0.0	0.0	11.6
2014	17.7	575.0	12.8	0.0	0.0	38.3	0.0	626.1
2015	28.3	941.8	14.0	0.0	0.0	50.3	0.0	1,006.0
2016	25.3	819.3	0.0	175.2	0.0	51.3	0.0	1,045.8
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total:</b>	<b>73.7</b>	<b>2,336.1</b>	<b>47.9</b>	<b>175.2</b>	<b>0.0</b>	<b>139.9</b>	<b>0.0</b>	<b>2,699.1</b>

Table 4 shows the registration and study fees applicable to the masters and PhD programme since inception. Note that the MCom total column is calculated as the total paid for the qualification by a student who completed the degree in that year<sup>2</sup>.

**Table 4: Student Registration and Study Fees**

Year	Reg Fee	Mcom Module Fees M1	Mcom Module Fees M2	Mcom Qual Total	PhD Study Fee	PhD Qual Total
2012	R1,100	R0	R0		R9,555	R10,655
2013	R1,230	R0	R0		R11,590	R12,820
2014	R1,360	R50,000	R50,000		R12,805	R14,165
2015	R1,490	R54,620	R54,625	R107,475	R13,990	R15,480
2016	R1,490	R54,620	R54,625	R112,225	R13,990	R15,480

Finally, Table 5 shows the research consultation generated by the Centre since 2012, all of which was subjected to the NWU profit-sharing model (20% of invoiced amount since 2016)

**Table 5: UARM Research Consultation Income**

Year	Income (R)
2012	25,667
2013	32,361
2014	7,600
2015	7,000
2016	79,727
<b>Total:</b>	<b>152,354</b>

<sup>2</sup> For example, the total study fee for a student who registered for the first time in 2014 and graduated in 2015 was R107,475 calculated as 2014 Reg Fees + 2014 M1 Study Fees + 2015 Reg Fees + 2015 M2 Study Fees.

## 8. Highlights

During 2016, the Centre achieved the following notable highlights:

- Class of 2016: All seven students passed their mini-dissertations, with three distinctions.
- The MCOM in Applied Risk Management was SAQA-registered in March 2016.
- The UARM Risk Culture Questionnaire (RCQ) has generated much interest in the organisations that our students work for. The questionnaire and related interventions offer commercialising/income generating opportunities
- Hermien Zaiman and Fred Goede attended the Risk Summit dedicated to risk culture at the Cambridge University Judge Business School from 20-21 June 2016.
- Emmanuel Mulambya was appointed as Lecturer, commencing duties on 1 June 2016.
- Two staff members started working on behavioural risk management related PhD proposals - Fred Goede (A sociotechnical approach to safety culture) and Emmanuel Mulambya (Programme risk).
- A number of PhD workshops were held in 2016 to allow potential candidates to explore their research ideas.
- Three short UARM marketing videos were produced following interviews with the UARM team, and current and former MCom UARM students at their work places.
- The UARM stand at the IRMSA Conference in September was a big success, and attracted much interest. Hermien Zaiman also did a presentation on Risk Culture at the conference.
- In September, Professor Gert Jan Hofstede from the Wageningen University, the leading expert in organisational culture, conducted a workshop on the topic with the UARM team. Mr Fred Goede, senior lecturer at UARM, will be doing his PhD under Prof Hofstede on the topic "Safety culture in high risk industries - a sociotechnical approach"
- Prof Jochen Runde (Cambridge University Judge Business School), presented a talk for UARM at FirstRand in November, entitled 'Thinking about the unknown'. One of his research interests is decision-making under extreme uncertainty and he agreed to become involved in the UARM activities, inter alia as an external examiner.

## 9. Challenges

The achievements mentioned in the previous section were counterbalanced by the following challenges:

- Little time for UARM team members to do own research leading to concerns about own academic career development;
- Extraordinary Prof Michael Damm was diagnosed with cancer in 2014 and passed away in December 2016 after the cancer returned.
- The risk culture research focus has proved to be an exciting and potentially business value-adding focus, but capacity may be a problem for such a wide research area.

## 10. The Road Ahead

The following are the main objectives of the Centre for 2017:

- Publishing as many as possible of the successful MCom mini-dissertations delivered to date;
- Nurturing potential PhD candidates with aim to accept viable PhD students from 2018 onwards;
- Building out the research programme - Publishing papers from research projects;
- Appoint suitable contract and (if possible) full-time staff members to strengthen the team.

## APPENDICES

### A: UARM Behavioural Risk Management Research Focus

**Main research question:** How to improve the integration of risk management into organisational management?



The aim of the UARM behavioural risk research programme is to develop tools to assess and improve the integration of formal risk management principles into organisational management. The aim of the UARM risk culture research project is to develop tools that can be used to assess the risk management culture ('risk culture') in organisations and to identify risk culture related areas for improvement.

We based our development of the UARM RCQ on the Hofstede cultural onion approach to culture. Hofstede, Hofstede, and Minkov (2010, p. 516) define culture as the trained unwritten rules of the social game or the 'collective programming of the mind that distinguishes the members of one group or category of people from another'. An organisation can be seen as a cultural group that consists of subgroups, each with their own subculture. We use the term organisational risk culture to refer to ways in which groups of people use risk management principles when making decisions on uncertain future events that could have a negative impact on reaching the organisation's objectives.

The UARM Risk Culture Questionnaire (UARM RCQ) is being developed and tested in the student research and organisation specific projects. In the questionnaire, we distinguish between risk management as a function in the organisation and the use of risk management principles during decision making in the organisation. For purposes of this questionnaire, we expect that participating organisations will have a formal risk management function intended to facilitate and oversee the use of risk management principles at the organisation's strategic and operational management levels.

Other risk culture related research projects include related topics such as risk attitude and understanding of risk, risk management and risk stakeholders in organisations.

#### Reference

Hofstede, G., Hofstede, G. J., & Minkov, M. (2010). *Cultures and Organizations, Software of the mind, Intercultural Cooperation and its importance for survival* (Third ed.). USA: McGraw Hill.

## B: External Collaborative Networks

Because of the discipline-independent nature of the UARM training and research we have had students with different academic backgrounds but with an established interest and experience in risk management attracted to the programme. The profile of guest lecturers is similarly varied.

Table B1 below gives a breakdown of the MARM graduates and guest lecturers per economic sector. This is followed by Tables B2 and B3 respectively depicting their role profiles.

**Table B1: MARM Graduates and Guest Lecturers per Economic Sector**

	MARM Graduate	MARM guest lecturer	Grand Total
Communications	1		1
Energy	1	1	2
Fin and Bus Services	6	8	14
Logistics	1		1
Public Sector	3		3
<b>Grand Total</b>	<b>12</b>	<b>9</b>	<b>21</b>

**Table B2: MARM Graduates Organisational Roles**

Role in Org	Number
Assistant Manager: Group Risk & Regulatory	1
Director: Risk Management	3
General Manager: ERM	1
Manager: Compliance and Risk	1
Manager: Risk Integration	1
Managing Exec: Corporate and Security Management	1
Senior Manager: Operational Risk	2
Principal Specialist: Governance	1
Specialist Manager: Credit Risk	1

## C: Student comments

Wilna Meiring, Managing Executive: Corporate Risk and Security Management, Vodacom (Class of 2016):

*'I am still astounded at how much I grew and learned during the past two years. The masters gave me so much more than I thought it could. Unbelievable at how positive it assists in my work. We have changed our whole approach to ERM in business and this makes me so excited.'*

Eddie Lindeque, Class of 2016 graduate and General Manager: Enterprise Risk Management, Transnet:

*'Dear Hermien*

*I just want to thank you for opening up a new world of behavioural risk management to me this year. It was a good learning experience and I have grown, even as a mature ERM specialist, in knowledge and what academia has contributed to the science of risk management. All the knowledge sharing and differences of opinion added the necessary spice to the learning experience.'*

Other student responses received to the question: "What did you like about the course?"

- *"I liked the course because it is applied and research based. It allows me to conduct research on current issues and that I am to apply those in my working environment"*
- *"The content The invited speakers on specialised areas The environmental scanning project was extremely useful"*
- *"Case studies that are dealt with during the lectures, gives us an opportunity to have meaningful discussions of real life examples"*
- *"I enjoyed the course content, for most parts it was practical and refreshing and not just text book styled and theoretical. The international angle with the colleagues from Holland was the stand out learning points to date"*
- *"The practical nature of it. I had to opportunity to perform various exercises that I would never have been able to do at work. I also like that the presenters also have "practical work" experience and that they are not pure academics. There is a big difference between theory and practice. I also like the small class and the very personal feedback after each assignment"*
- *"The networking and sharing of information. Especially where we can see and experience how other people implemented the theory. That I could make the case studies practical and add value to my current work"*

## D: Photo Gallery

- 2017 May 12: UARM Graduation - Class of 2016, comprising of seven graduates.



**Front:** Dr Elisabeth Lickindorf, Dr Sonja Gilliland, Prof Hermien Zaaiman, Christine Bezuidenhout, Wilna Meiring, Kishen Padayachee  
**Back:** Fred Goede, Neels Erasmus, Ane-a Harding, Eddie Lindeque, Vasie Naiker, Graham Baker

**Absent Graduates:** David Kalima

Wilna Meiring (right) with the prizes for both the Top Student and the Best Presentation from the UARM Graduate symposium



- 2017 Mar 31: UARM Graduate Symposium - celebrating the achievers in the Graduates of 2016



- **2016 Sep 12:** A leading expert in organisational culture, [Professor Gert Jan Hofstede](#) from the Wageningen University, conducts a workshop on the topic with the UARM team. The UARM research focus on risk culture is expected to benefit from this body of knowledge. Mr Fred Goede, senior lecturer at UARM, will be doing his PhD under Prof Hofstede on the topic "Safety culture in high risk industries - a sociotechnical approach"

