Automation of an Academic Workload Model at a developing University of Technology in South Africa

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Session Outline

- Introduction
- Process and Data Sources
- Navigation
- Administrative tasks
- User tasks
- Workload/Time-sheet Reports

Intro: Workload Definition

- The workload of an academic is the aggregated time spent on academic and administrative duties.
- One workload unit is equal to one hour.
- Expected/Normal Load per semester week = 40 hr i.e. (8hr per day X 5)

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Intro: Possible Workload Factors

Contact times, Class size, Type of Class, Mode of delivery, Consultation, WIL, Subject level, Use of tutors, Experience, Community engagement, Nature of subject, Academic administration, Assessment, Research publications, Team teaching, Postgraduate supervision, Repeated subject, New subject …

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Academic Workload

Academic

Teaching & Learning

Research

Community Engagement

Administration

Academic Administration

Meetings

Admission & Selection

E.T.C

Summary of the Workload System

Background

The purpose of an academic workload model is to provide a mechanism for ensuring that academic workloads are distributed equitably and transparently. It could also be used for automation of timesheet reporting to DHET. Most importantly, the model could be used as a planning tool for academic staffing.

Workload

The following formula will be used in the HEDA Workload Model to calculate the total workload:

Teaching and Learning per subject***{ (CN x WHR x SF x (0.5 + (0.5 x (CS/AS))) – TU)}/TS***
+ Work Integrated Learning contact hours
+ Research and Innovation contact hours
+ Community Engagement contact hours
+ Administrative Duties contact hours

CN - Contact hours per week
WHR - Work hours required per contact hour
SF - Subject factor
CS - Class size
AS - Average class size of Faculty
TU - Hours saved by using a tutor
TS - Team size

[2] The constant 0.5 and multiplier 0.5, provides the balanced division for work that increases in proportion to class size

Intro: Workload Distribution by Rank

ACADEMIC LEVEL	T & L (%)	R & I (%)	CE (%)	ADMIN (%)
Junior Lecturer	≥ 80			
Lecturer	≥ 75			
Senior Lecturer	≥ 65			
Assistant Professor	≥ 65			
Associate Professor	≥ 65			
Professor	≥ 60			
Research Professor		≥ 90		
Programme Coordinator	≥ 50			≥ 30
HOD Service Dept	≥ 50			≥ 30
HOD Programme Dept				≥ 60
Dean				≥ 90

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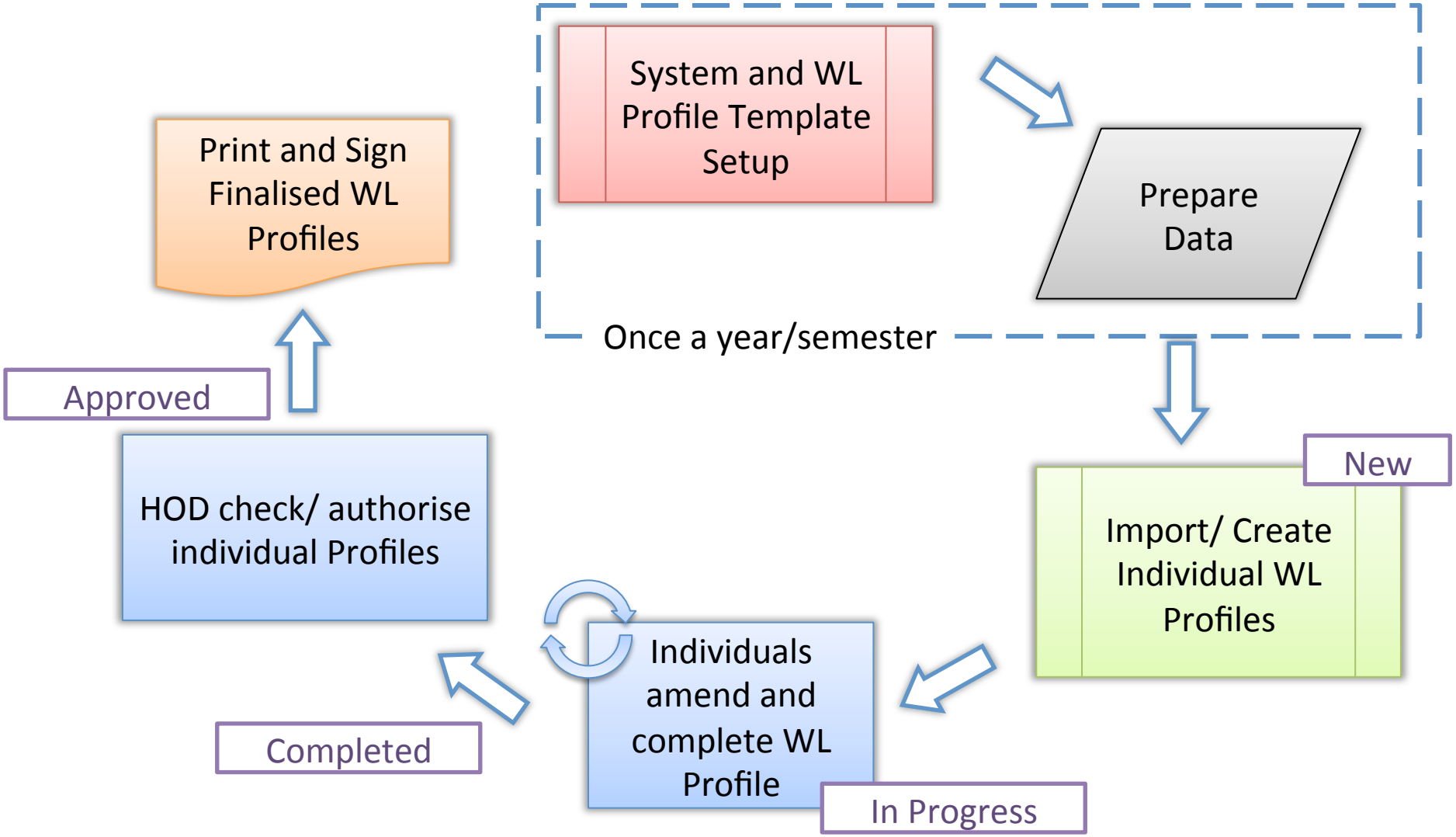
Process



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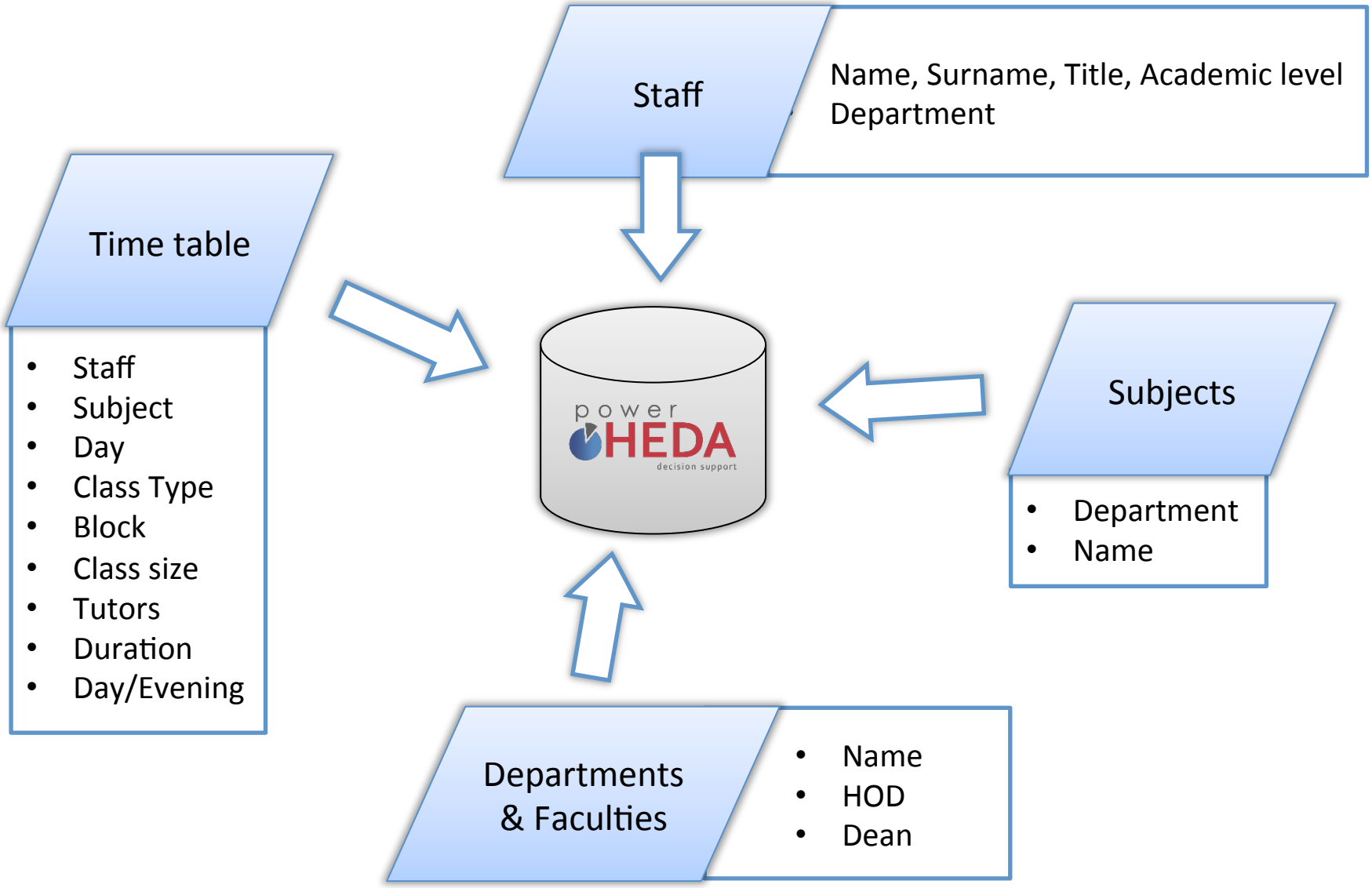
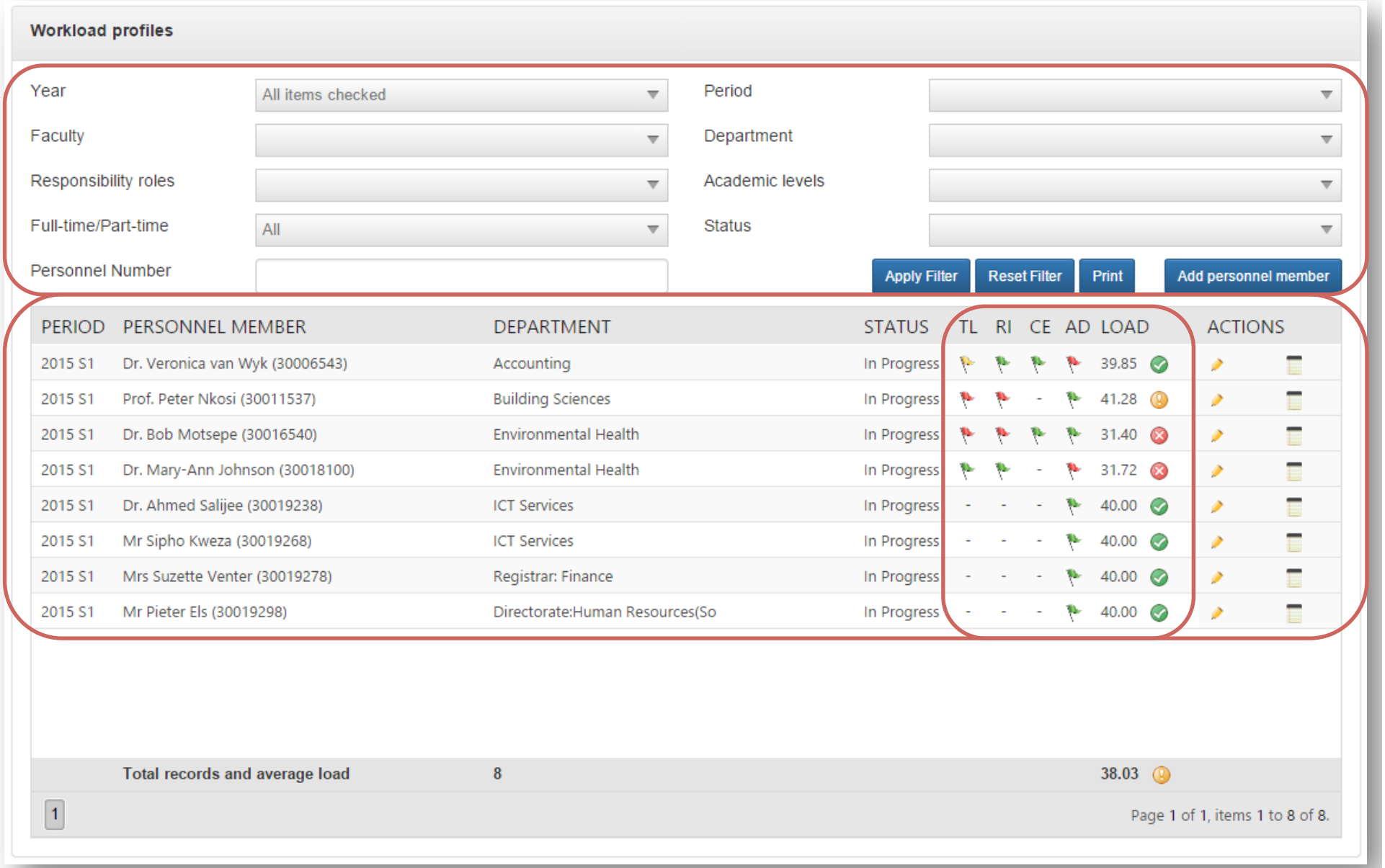
Data Sources





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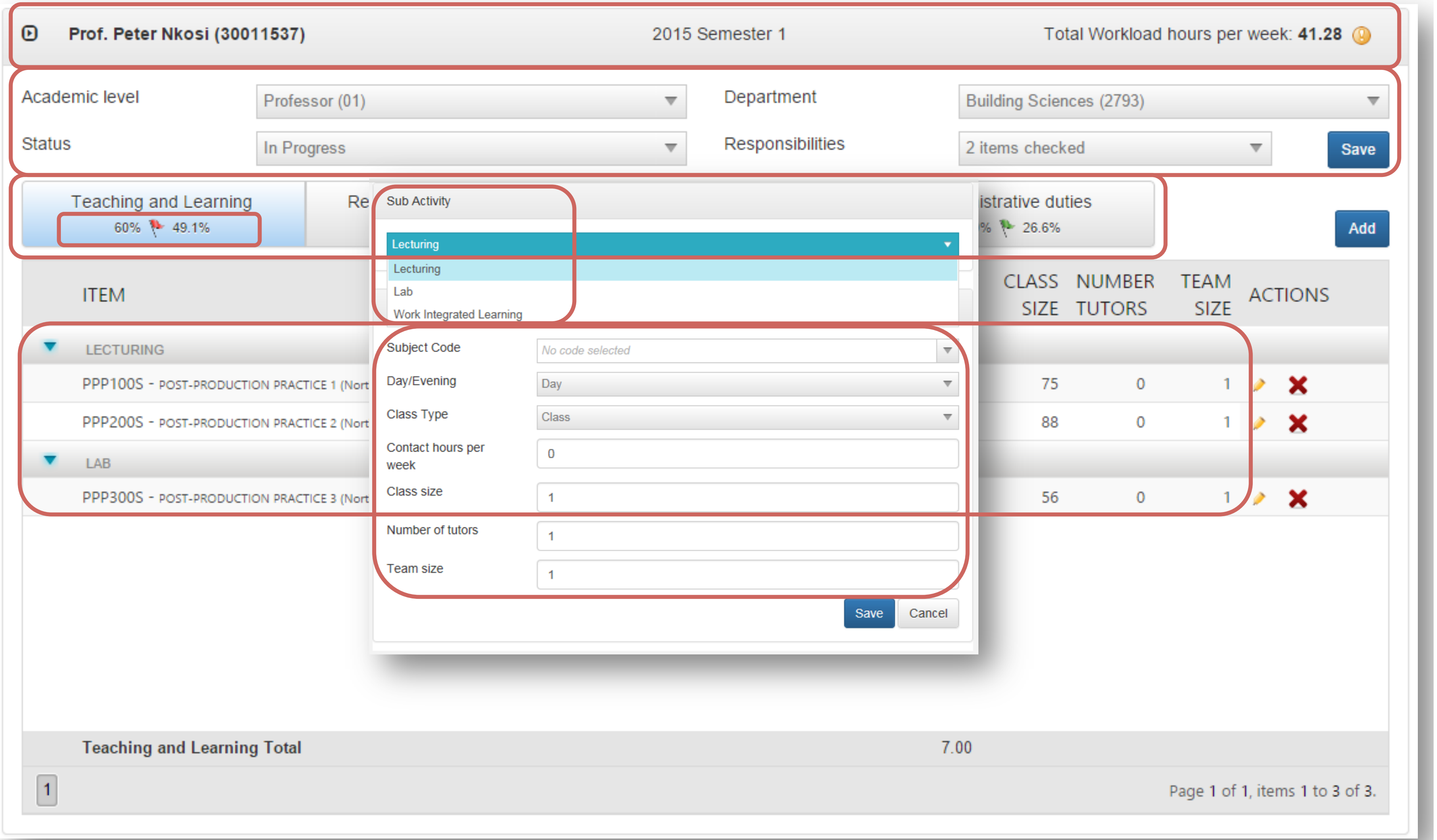
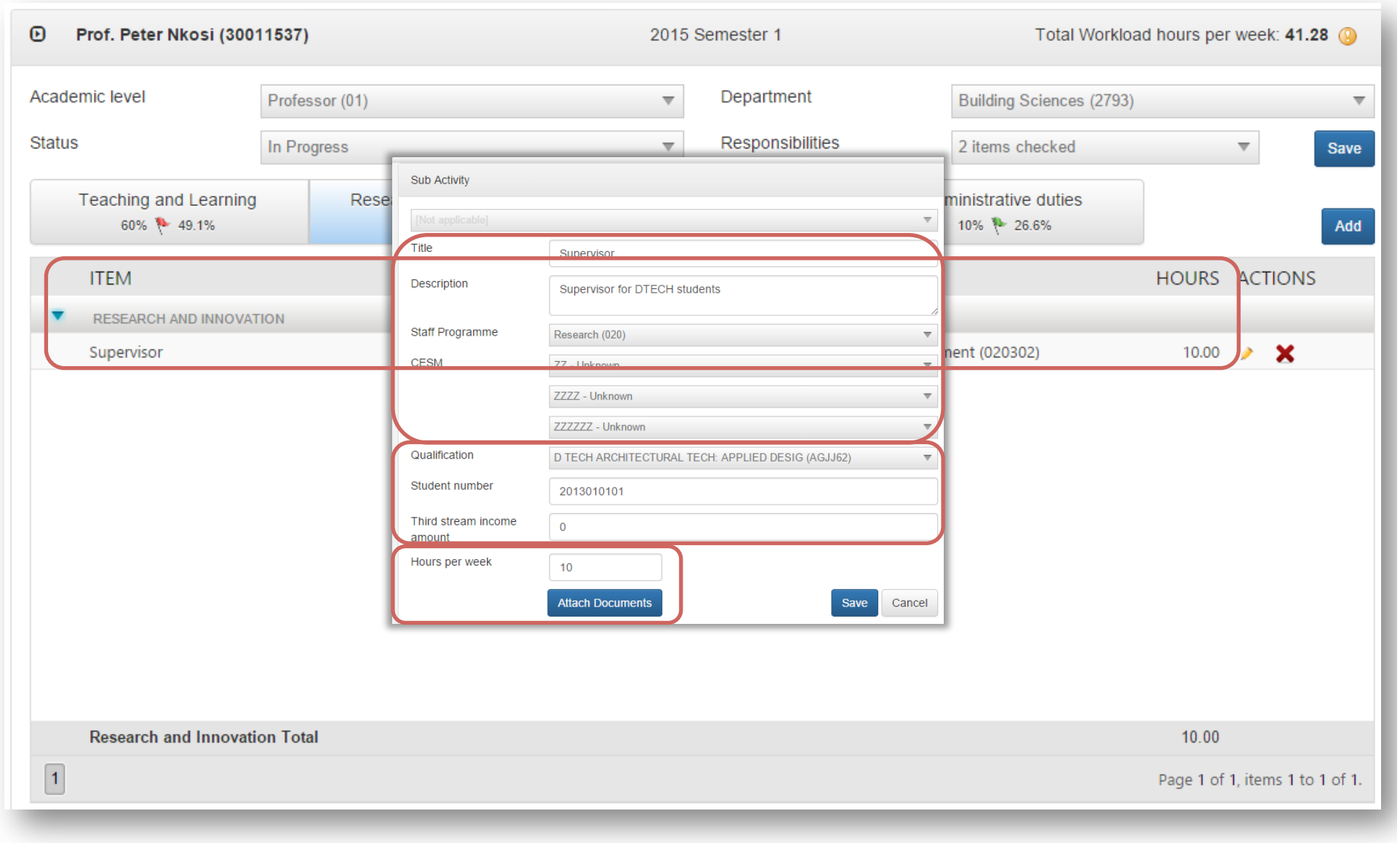

Prof. Peter Nkosi (30011537)
2015 Semester 1
Total Workload hours per week: 41.28
Academic level
Professor (01)
Department
Building Sciences (2793)
Status
In Progress
Responsibilities
2 items checked
Save
Teaching and Learning
60% 49.1%
istrative duties
26.6%
Add
Sub Activity
Lecturing
Lecturing
Lab
Work Integrated Learning
ITEM
CLASS SIZE
NUMBER TUTORS
TEAM SIZE
ACTIONS
LECTURING
PPP100S - POST-PRODUCTION PRACTICE 1 (Nort
75 0 1
PPP200S - POST-PRODUCTION PRACTICE 2 (Nort
88 0 1
LAB
PPP300S - POST-PRODUCTION PRACTICE 3 (Nort
56 0 1
Subject Code
No code selected
Day/Evening
Day
Class Type
Class
Contact hours per week
0
Class size
1
Number of tutors
1
Team size
1
Save
Cancel
Teaching and Learning Total
7.00
1
Page 1 of 1, items 1 to 3 of 3.



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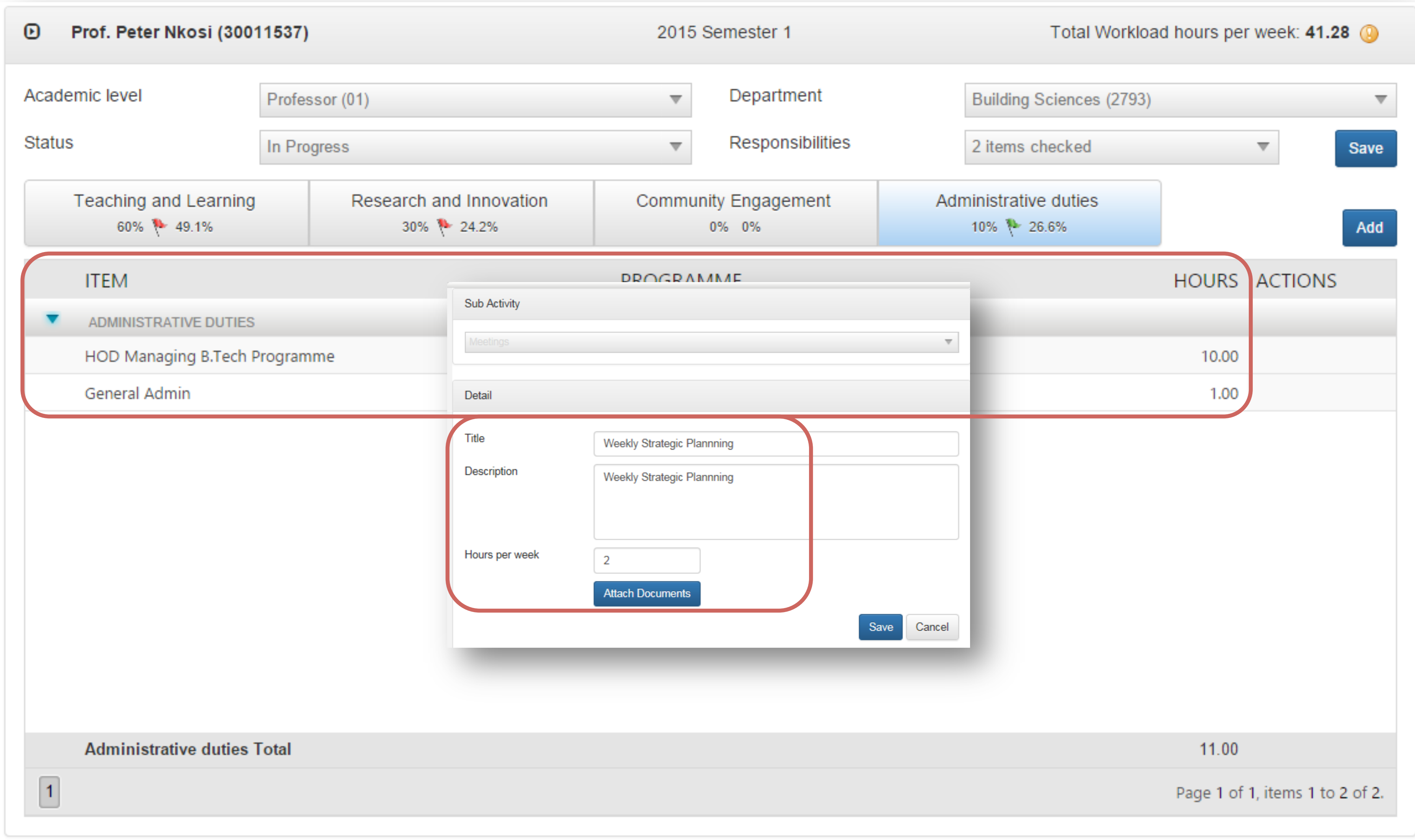

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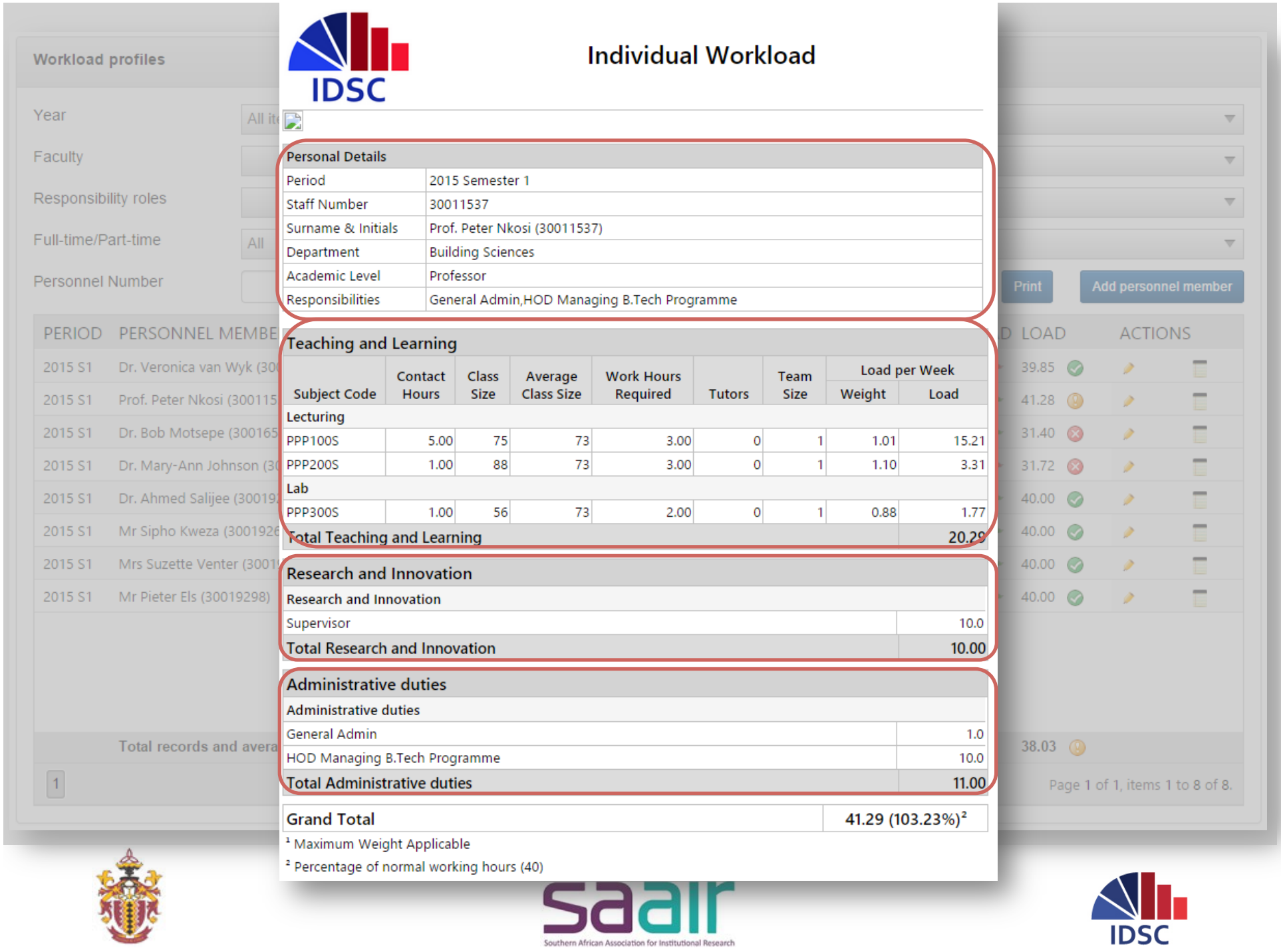

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Individual Workload

Personal Details	
Period	2015 Semester 1
Staff Number	30011537
Surname & Initials	Prof. Peter Nkosi (30011537)
Department	Building Sciences
Academic Level	Professor
Responsibilities	General Admin,HOD Managing B.Tech Programme

Teaching and Learning

Subject Code	Contact Hours	Class Size	Average Class Size	Work Hours Required	Tutors	Team Size	Load per Week	
							Weight	Load
Lecturing								
PPP100S	5.00	75	73	3.00	0	1	1.01	15.21
PPP200S	1.00	88	73	3.00	0	1	1.10	3.31
Lab								
PPP300S	1.00	56	73	2.00	0	1	0.88	1.77
Total Teaching and Learning								20.29

Research and Innovation

Research and Innovation	
Supervisor	10.0
Total Research and Innovation	**10.00**

Administrative duties

Administrative duties	
General Admin	1.0
HOD Managing B.Tech Programme	10.0
Total Administrative duties	**11.00**

Grand Total	**41.29 (103.23%)[2]**

[1] Maximum Weight Applicable

[2] Percentage of normal working hours (40)

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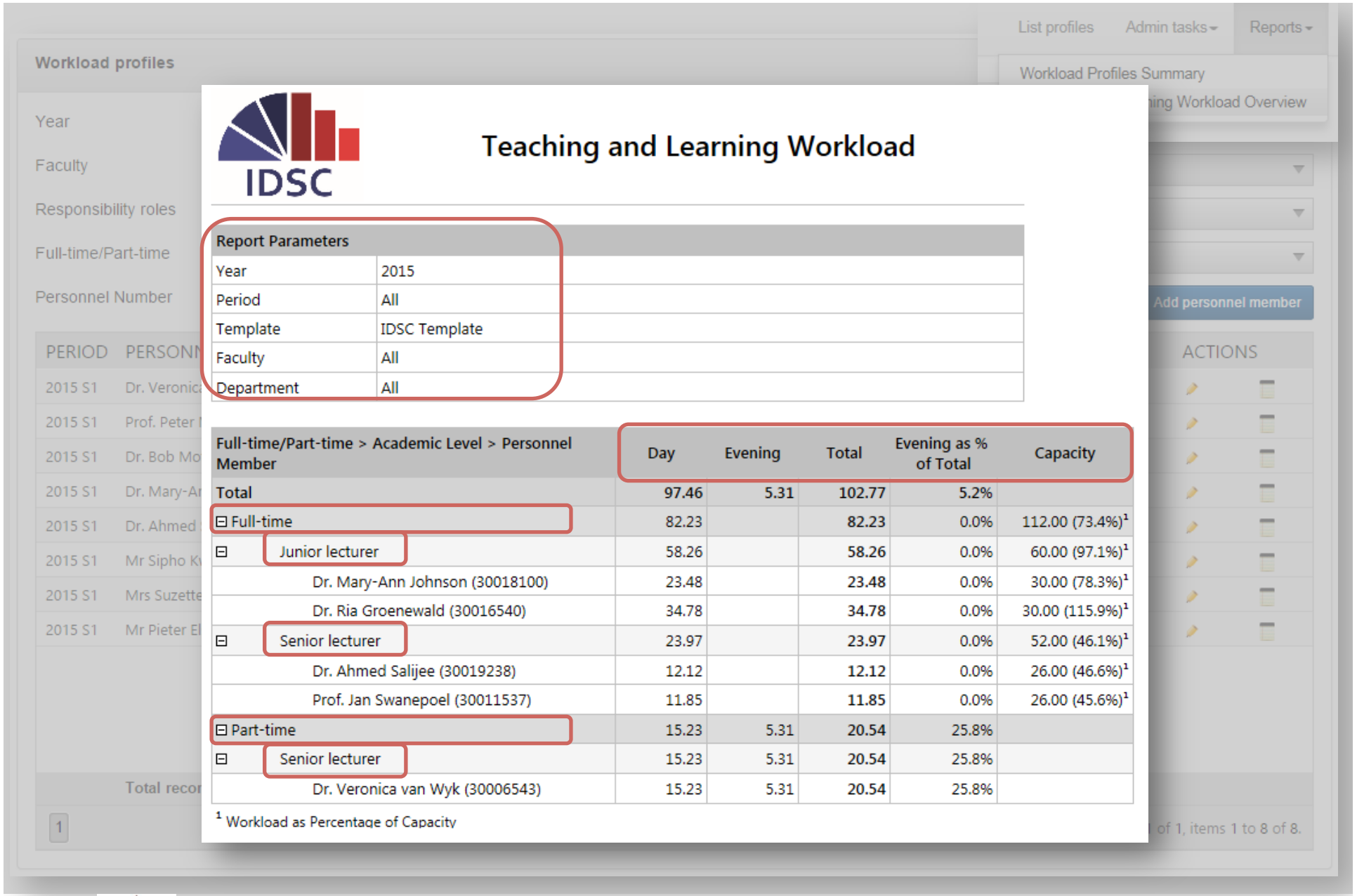

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Teaching and Learning Workload

Report Parameters	
Year	2015
Period	All
Template	IDSC Template
Faculty	All
Department	All

Full-time/Part-time > Academic Level > Personnel Member	Day	Evening	Total	Evening as % of Total	Capacity
Total	**97.46**	**5.31**	**102.77**	**5.2%**	
⊟ Full-time	82.23		82.23	0.0%	112.00 (73.4%)[1]
⊟ Junior lecturer	58.26		58.26	0.0%	60.00 (97.1%)[1]
Dr. Mary-Ann Johnson (30018100)	23.48		23.48	0.0%	30.00 (78.3%)[1]
Dr. Ria Groenewald (30016540)	34.78		34.78	0.0%	30.00 (115.9%)[1]
⊟ Senior lecturer	23.97		23.97	0.0%	52.00 (46.1%)[1]
Dr. Ahmed Salijee (30019238)	12.12		12.12	0.0%	26.00 (46.6%)[1]
Prof. Jan Swanepoel (30011537)	11.85		11.85	0.0%	26.00 (45.6%)[1]
⊟ Part-time	15.23	5.31	20.54	25.8%	
⊟ Senior lecturer	15.23	5.31	20.54	25.8%	
Dr. Veronica van Wyk (30006543)	15.23	5.31	20.54	25.8%	

[1] Workload as Percentage of Capacity

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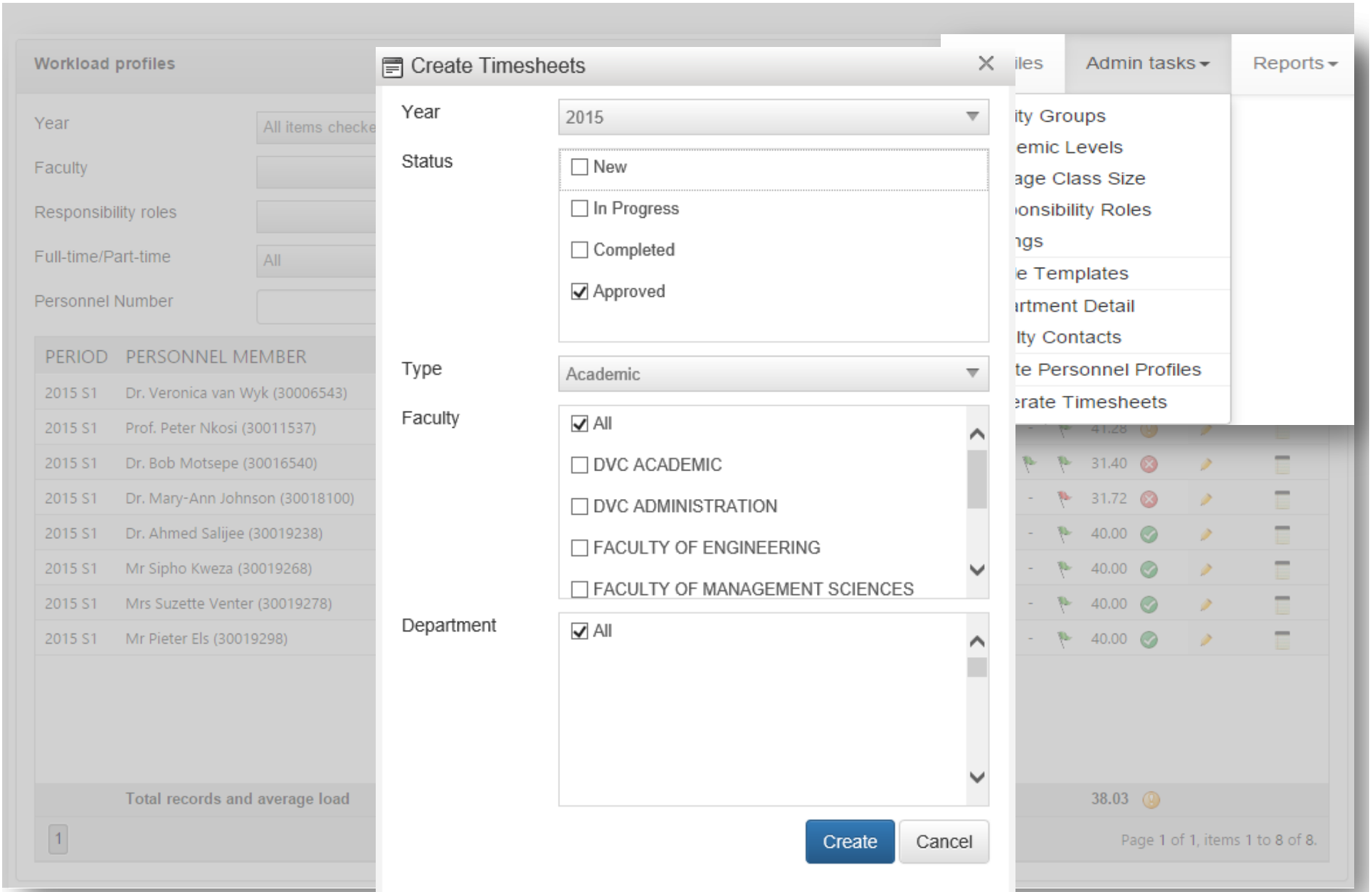

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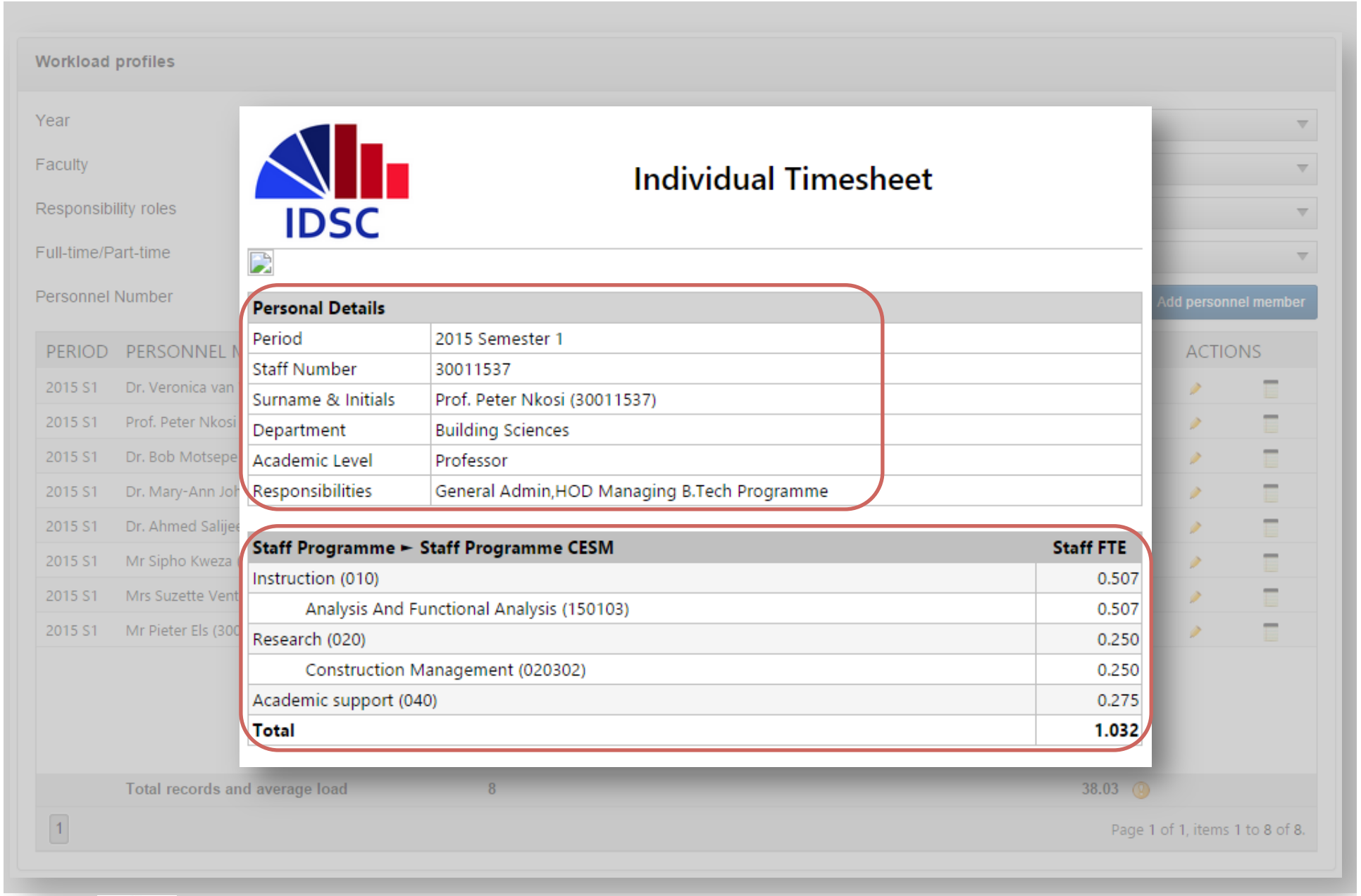

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Thank you.

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