Business Analysis Requirements

User Allocation

Table of Contents

1 Overview

The Business Analysis for George Brown College (GBC) LMS Process improvement template is intended to provide business analysts working on User allocation and Team management process initiatives with the structure and guidance to capture needs, scope, and detail-focused requirements, specifications, and models necessary to complete the Process Definition Documents (PDD) and to act as a critical input to Solution Design Document (SDD). The Requirements Specification will serve as a repository for all Business Analysis artifacts produced.

2 Using the Requirements Template

The Requirements Template provides readers with a comprehensive understanding of the needs, scope and specifications leading to a solution. When using the Requirements Template:

- Uniquely identify each artifact documented
- Complete the Requirements Trace Matrix to ensure comprehensive requirements coverage

3 Requirements Template Author(s)/Reviewer(s)

The Business Analyst(s), or alternative role(s) authoring or reviewing the Requirements Template. Reviewers are the individuals who evaluate the content for quality, completeness and accuracy. List the names, roles performed on the project, when they were engaged and the date they sent in their final acknowledgement of completed review

Name	Role (Author/Reviewer)	Start/Review Date
Guilherme Matsumoto Tommasini	Author	2024/02/24
Anshul Bedwal	Author	2024/02/24

4 Requirements Template Distribution List

Those who will receive a copy of the completed, signed off Requirements Template. Provide the full name, role and contact information.

Name	Role	E-Mail
Tyler Krimmel	Sponsor	

5 Requirements Template Approver(s) List

Those Business and/or Technology leads who will receive a copy of the completed Requirements Template, and who must accept what has been documented in the Requirements Template.

Name	Title	Date	Signature
Tyler Krimmel	Professor	2024/02/25	

6 Requirements Template Reference Artifacts(s)

This information in this section provides context for the project, based on the input information used to support the vision and needs of this initiative.

File/Artifact Name	Source/Location
YouTube Brightspace tutorial from D2L	https://www.youtube.com/channel/UCLSxTdOzKAFOCZjXav1aCRQ
Elicitation report	During stakeholder elicitation
Brightspace user review (University faculty and admin)	https://www.trustradius.com/products/brightspace/reviews?qs=pros-and-cons#reviews

7 Introduction

This section of the Requirements Template provides readers of this document with the Business Requirements of the Initiative. This includes; Goals, Objectives, Problem/Opportunities, and Current State Process Maps.

7.1 Goal(s)

Qualifiable statements defining what the organization is seeking to establish and/or maintain.

Unique ID	Goal Statement
GO001	Enhance student communication and support channels within the LMS
GO002	Streamline administrative processes associated with user allocation

7.2 Objective(s)

Statements of the quantitative measures of success to be realized.

Unique ID	Objective Statement	Traced to:
OB001	Automate the course registration and enrollment process for single-course takers, [reducing administrative processing time by 100% within 6 months].	GOAL002
OB002	Implement better mechanism for emailing the student once the enrolment process is completed.	GOAL001

7.3 Problem/Opportunity Statement(s)

The Problem/Opportunity Statements (POs) provide factual, quantifiable, and concise descriptions of a problem or opportunity.

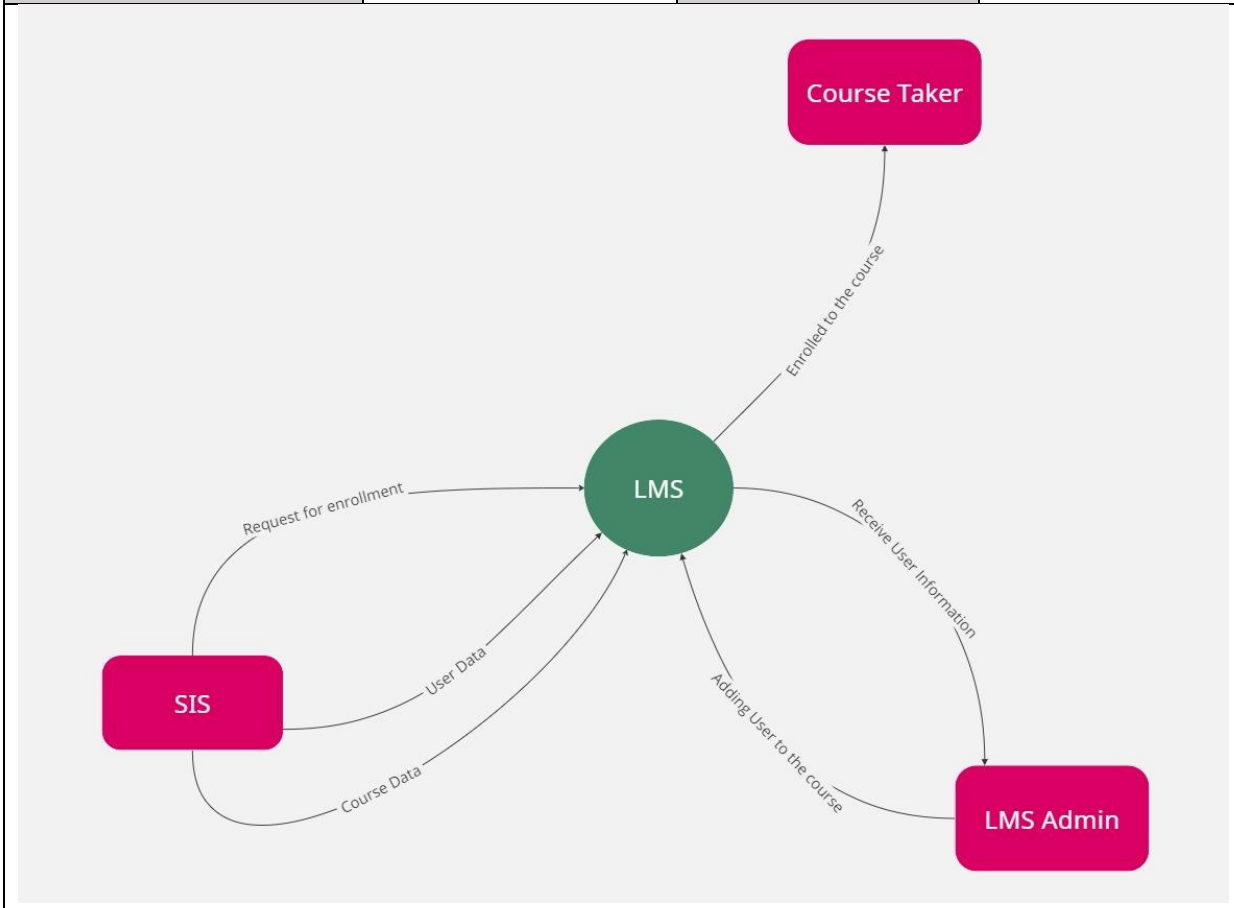
Unique ID	Problem/Opportunity Statement	Traced to:

PO001	**Problem:** Students not receiving timely notification of course enrolment. • Occurs when single course enrolments happens, causing delays and uncertainty in students' academic planning. **Impacted:** Students.**Benefits of Addressing:** Improved student experience, timely academic progression.	OB002
PO002	**Opportunity:** Streamline the single-course taker registration process. • During the course registration process, this could reduce friction for students seeking specific courses and decrease administrative workload. • **Impacted:** Students, **LMS** Administrators • **Benefits of Achieving:** Increased course enrollment, reduced administrative burden, enhanced user experience.	OB001

7.4 As-Is/Current State Process Map(s)

7.4.1 As-Is/Current State Process Map(s) – Level 2

Process Name:	Buisness Context Diagram		
Unique ID:	CSPM-001	Level: 2	L2

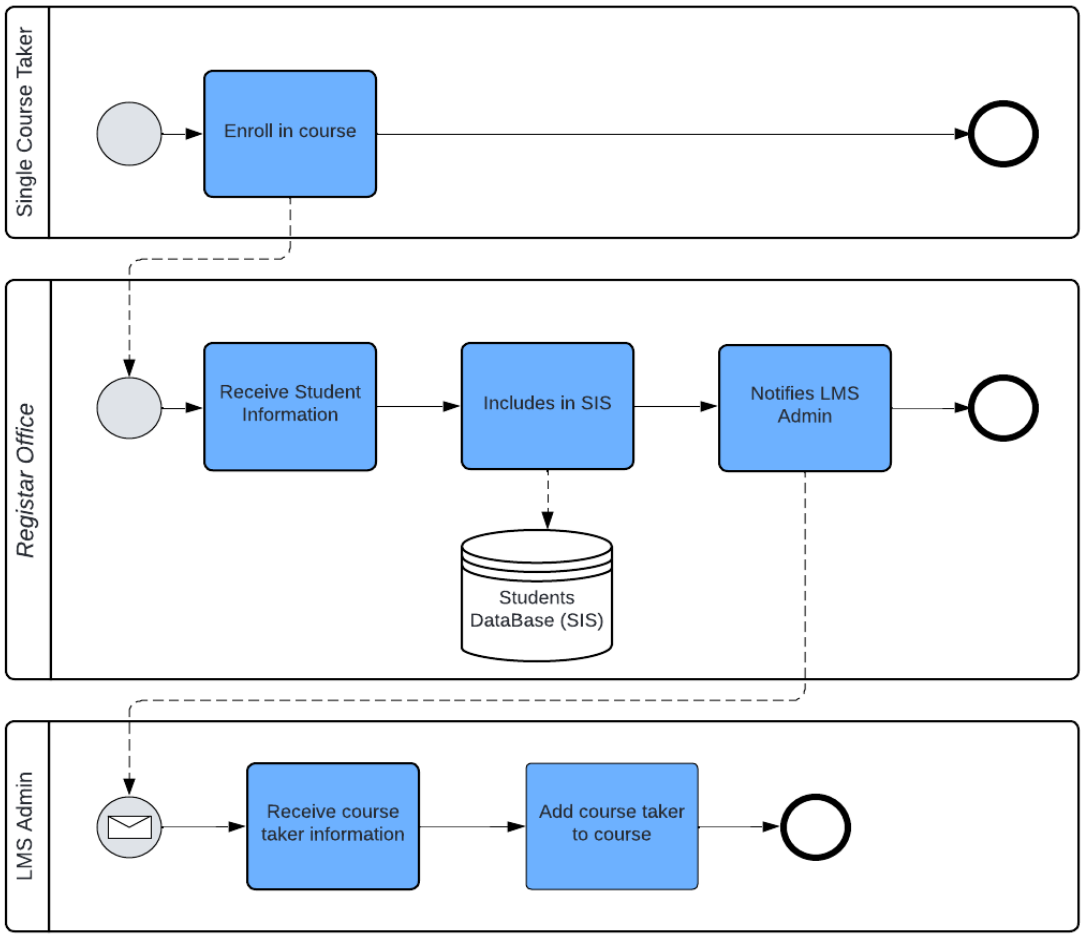


Description:	The L2 map represents the processes involved in Including Users in the LMS Brightspace.
Process Metrics:	The average time taken to include a new user into the system is about 2 min per existing user and 7 min for new user. The average number of students included each term is about 2000.
DOWNTIME Analysis:	1. Time spent waiting for different steps to be completed. 2. Staff time dedicated to low-value, repetitive tasks. 3. There are multiple systems involved; if there is a complication, it will require a multi-step process to fix it.

7.4.1.1 As-Is/Current State Process Map(s) – Level 3

Process Name:	Course Taker Inclusion

Unique ID:	CSPM-001.S01	Level:	L3



Description:	This process describes the steps involved in enrolling into a course by a single course taker on the Learning Management System.
Process Step Details:	The average time taken to include a single course taker into the LMS system: • New user - 5 mins to create the user and 2 mins to enroll user to an existing course Existing user- 2 mins to enroll user to an existing course
DOWNTIME Analysis:	1) Time spent waiting for different steps to be completed 2) Staff time dedicated to low-value, repetitive tasks 3)There are multiple systems involved, if there is a complication, it will multi-step process to fix it.

8 Requirements Scope

Scope/Stakeholder Requirements address the business need(s). These statements and models form the boundary of the 'Requirements Scope', which is a subset of the overall

project scope. This section will include: High-Level Requirements Statements, Out-of-Scope, and scope models (e.g. Business Context Diagram). For each table, add rows as required.

8.1 High-Level Requirement(s)/In Scope

Statements of the needs of a particular stakeholder or class of stakeholders that enable the Business Requirements. The initiative must meet these needs. For each Requirement Statement, ensure to define the Priority (High, Medium, Low) as well as trace to P/O statements

Unique ID:	High-Level Requirement Statement(s)	Priority	Traced to:
HLR001	Streamline administrative tasks associated with course takes allocation to reduce time and staff workload	High	PO003 PO004
HLR002	Implement a more efficient mechanism for notifying students upon course enrollment completion	High	PO001 PO002

8.2 Out-of-Scope

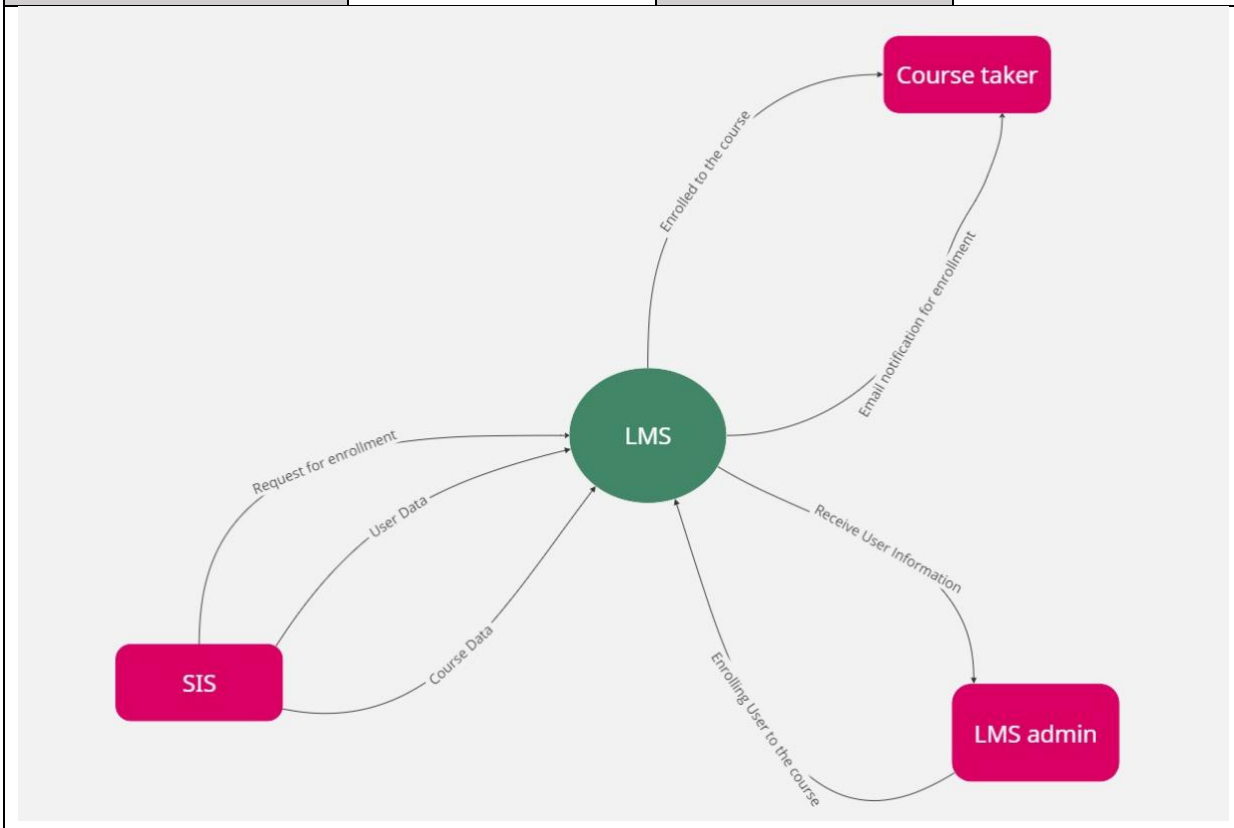
This Section is meant to document results of the discussions and decisions that were made to exclude requirement(s) from the scope of the initiative. Be sure to define the rational for exclusion

Unique ID:	Out-of-Scope Statement(s)	Rational
OS001	Development of UI	The project focuses on implementing automation to include/remove students from courses, Therefore, no new user interfaces are needed.

8.3 Scope Model(s)

Technique(s) that provides a view of the business needs, external of the solution. Describe each of the entities and information flows depicted in the diagram to avoid ambiguity

Scope Model:	Business Context Diagram (LMS)		
Unique ID:	BCD001	Traced to:	CSPM-001



Entity Descriptions:	• **Course Talker** (Students and single course takers) • **LMS Admin** • **SIS (Students Information System - Stu-View)**
Information Descriptions:	Student Data coming from SIS refers to it's personal information, such as name and ID, and courses they are taking to be included in LMS

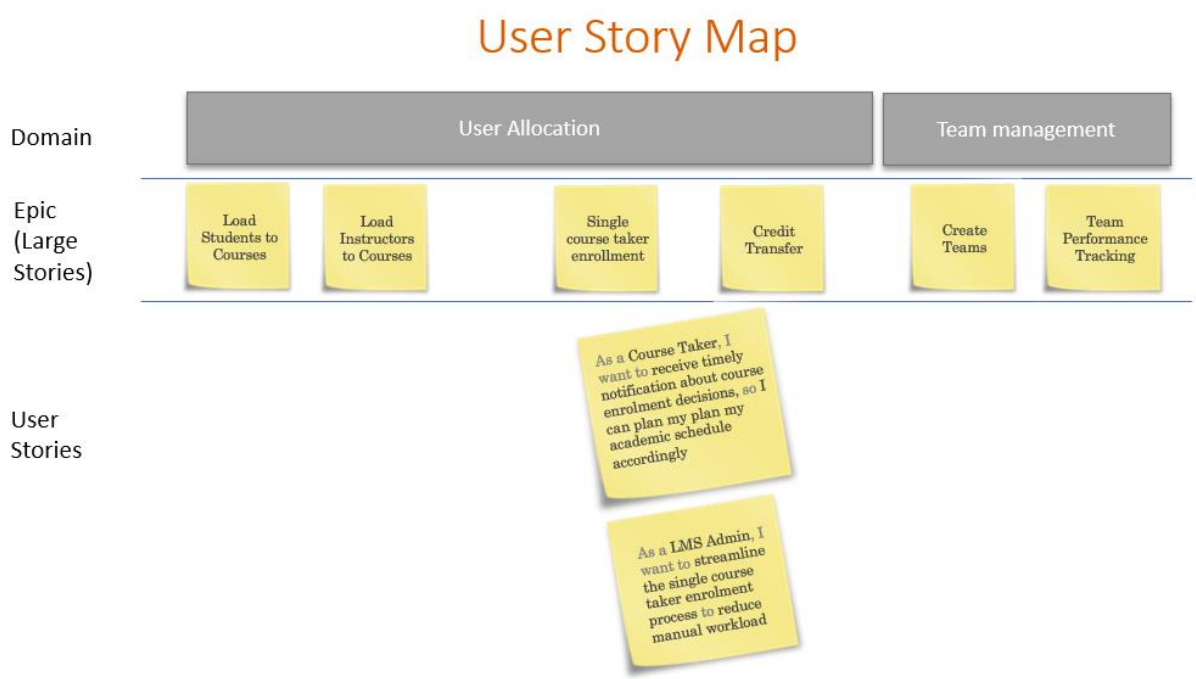
9 Solution Requirements

This section describes the capabilities and qualities of a solution that meets the stakeholder requirements. They provide appropriate level of detail to allow for development and implementation of the solution. This section will include: Future State/To-be Process Maps (L2/L3), Process Specifications (Use Cases), Business Rules & Calculations, Data Requirements, UI/Screen Specifications & Notifications, Reporting Requirements, and Non-Functional Requirements.

9.1 To-be/Future State Process Map(s)

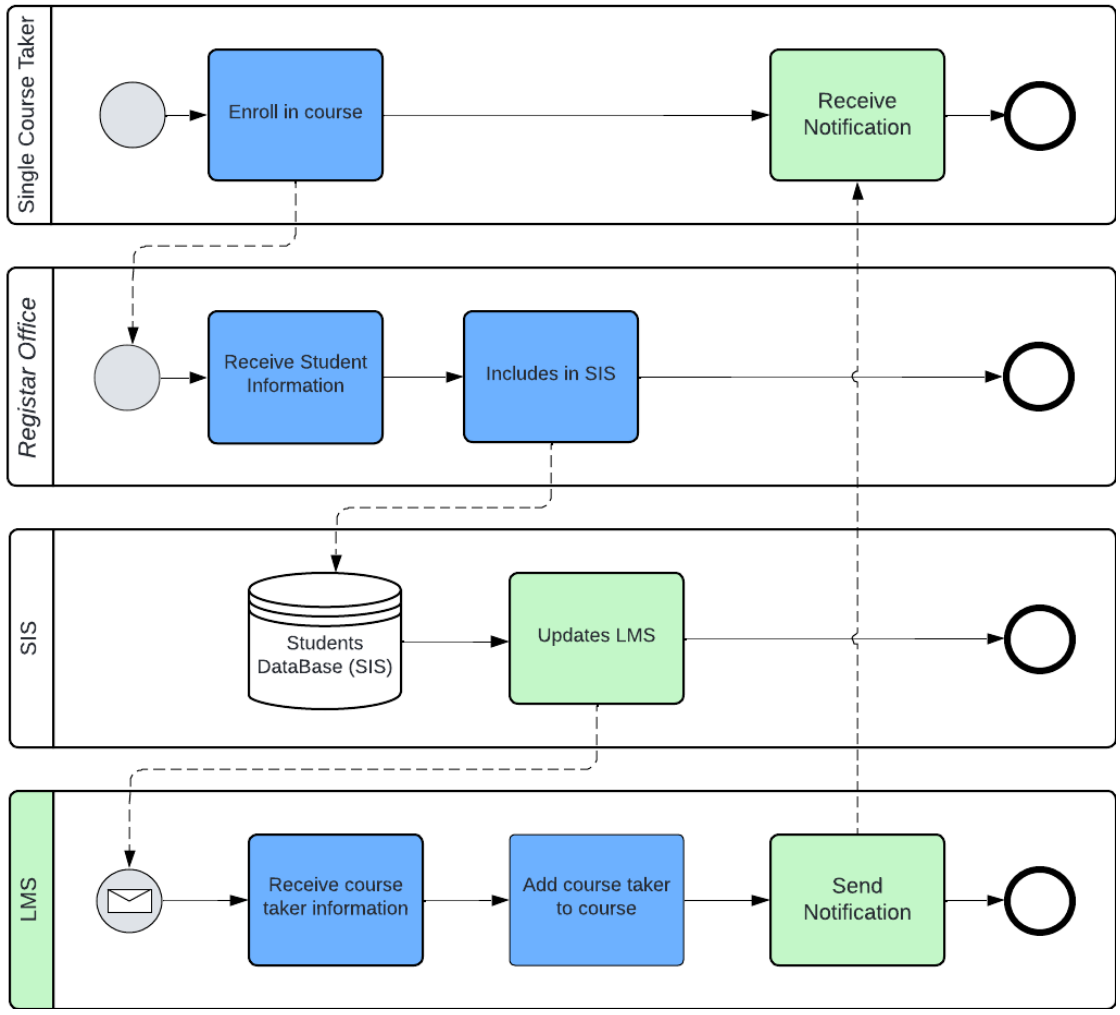
Document the future state processes following the process taxonomy defined (L2/L3). For each process mapped, provide a summary description. For L2 Future State Maps, be sure to summarize each key activity/function defined. Replicate these tables as needed for each map.

9.1.1 To-be/Future State Process Map(s) – Level 2

Process Name:	User Story Map		
Unique ID:	FSUSM-001	Level:	L2
			
Description:	A high-level user story map (Level 2) outlining epics within a future-state process. This map serves as a tool for teams to visualize user needs and plan product development.		
		Traced to:	OB001 OB002

9.1.1.1 To-be/Future State Process Map(s) – Level 3

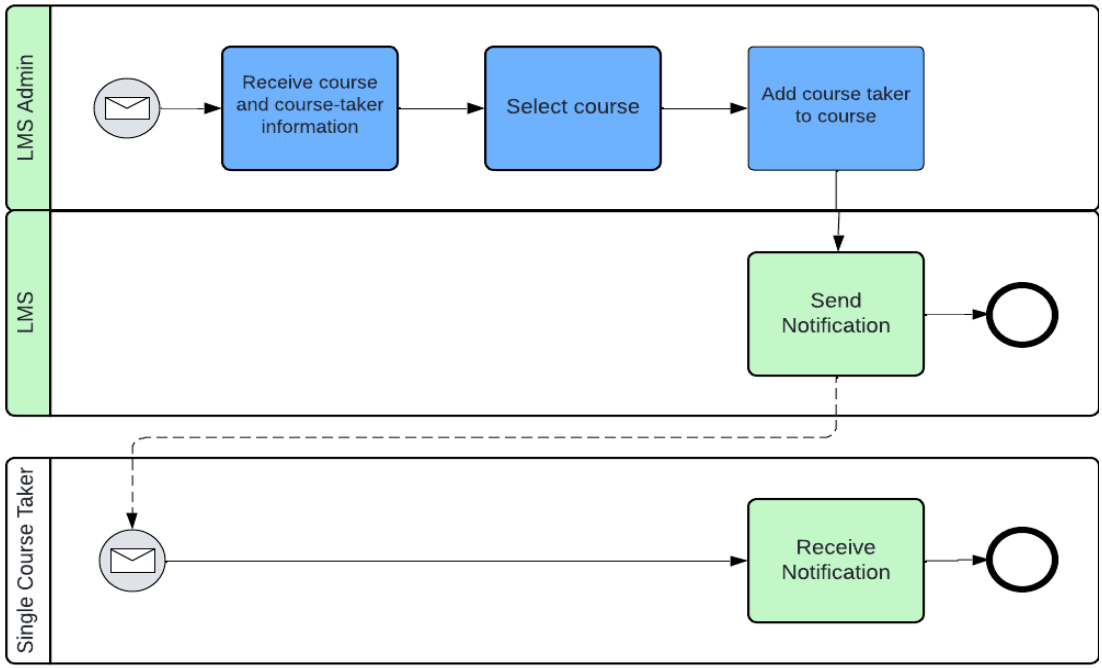
Process Name:	Course Taker Inclusion		
Unique ID:	FSPM-001	Level:	L3



Description:	This process describes the Future State steps involved in enrolling into a course a single course taker on the Learning Management System. Green colored steps are proposed changes.		
		Traced to:	CSPM-001.S01

9.1.1.2 To-be/Future State Process Map(s) – Level 3

Process Name:	Manual Course Taker Inclusion		
Unique ID:	FSPM-002	Level:	L3



Description:	This process describes the steps involved in manually enrolling into a course a single course taker on the Learning Management System.		
		Traced to:	CSPM-001.S01

9.2 Use Case(s)

The Use Case Specification provides elaborated details of a L3 Business Process Map. Within the context of a Process Map, it demonstrates the expected interaction with the system(s). In the context of an RPA initiative, the Robot will be identified as an actor, so that interaction, scenario flows, logic, and information used by the Robot are clearly defined.

9.2.1 Actor Summary

Define the actors (people, systems) in scope of the use case specifications provided. A Use Case Diagram can be used to visually represent actors.

Unique ID:	Actor Description	Role (Primary/ Secondary)	Traced to L3:
ACT001	SIS	Primary	FSPM-001
ACT002	LMS Admins	Secondary	FSPM-001
ACT003	Course Taker	Secondary	FSPM-001 FSPM-002
ACT004	LMS Admins	Primary	FSPM-002

9.2.2 Use Case Specification(s)

The Use Case Specification provides details on steps, data, rules, interface, and reporting for each Use Case identified in the Use Case Diagram.

Unique ID:	Use Case Specification Name & Description	UC Specification File (attachment)	Traced to L3:
UC001	Student Inclusion This use case describes a scenario where SIS wants to include a student in a single course	4053-Final-Use Case Specification	FSPM-001
UC002	Manual Student Inclusion: This use case describes a scenario where the LMS Admins needs to manually include a student in a single course	4053-Final-Use Case Specification	FSPM-002

9.3 Report(s)

Reporting requirements document the business knowledge to be presented in the process of enabling a goal.

Unique ID:	Report Specification Name & Description	Report Specification File (attachment)	Traced to:
RC01	Student Inclusion Report: This report consists of a notification and summary for the Student included in courses.	4053_Reporting	GO001

10 Non-Functional Requirements

Non-Functional Requirements describe a system operation, or quality. These qualities may include describing a systems performance, capacity, security, availability, redundancy and recovery, and continuity. Listed below are a primary subset of key NFRs for RPA consideration. Complete this only as needed, as NFR conditions may have already been included as part of the HLR statements.

Unique ID:	NFR Category	NFR Requirement	Traced to:
NFR001	Hours of Usage	24 hours a day	UC01 UC02
NFR002	Days of Usage	7 days a week, including holidays	UC01 UC02

NFR004	Response Time	Realtime	UC02
NFR005	# of concurrent events	up to 10 (LMS Admin manual work) 1 batch process	UC01 UC02
NFR006	# of system users	Up to 10 (LMS Admin)	UC02
NFR007	# of peak events	System should be able to enroll 4,000 course takers	UC01
NFR008	Response Time	Batch	UC01

11 Additional Details & Notes

11.1 Focus of the project during its life-time

As we evolved in our elicitation and research process we decided to focus on the issues that seemed more impacting for the final users of LMS:

1. The processes of adding users with different roles other than regular student and regular instructor;
2. The lack of uniformity on Team Management and teams work evaluation

11.2 Additional roles

LMS admins sometimes create specific roles for students, such as:

- Instructional Assistant (TA-like role with limited access)
- Advisor/Auditor (Can view the course, but not participate)
- Accessibility Support (For providing accommodations

Those roles don't currently exist in Brightspace therefore they must be configured manually.

11.3 Team Management

As we built deeper understanding of the processes related to team creation and evaluation, we realized that the issues faced by the students were result of ill transitional definitions when migrating from Blackboard to D2L. All the features that students were missing actually exist on Brightspace, and we identified that the root cause of the problem is just lack of awareness on how to set up them.

Therefore, no new solution or functionality is necessary to cover these specific issues, but it needs to be implemented a more broad and visible training to the staff.

12 Requirements Trace Matrix

Use this table to summarize the traceability between the requirements artifacts captured throughout this document.

Goals	Objectives	Problems/ Opportunities	HLRs	BCD	FSPM L2	FSPM L3	Actors	Use Case(s)	Reports	Other
GO001	OB001	PO001	HLR001	BCD001	FSUSM-001	FSPM-001	ACT001, ACT002, ACT003	UC001	RC01	-
GO002	OB002	PO002	HLR002	BCD002	FSUSM-001	FSPM-001, FSPM-002	ACT004	UC002	-	-