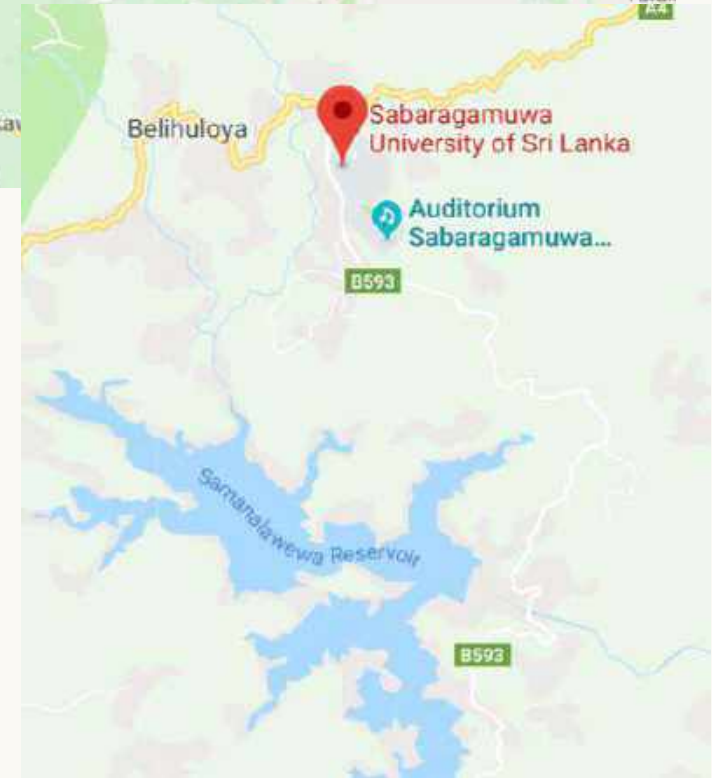




Overview –Proposed Building for Faculty of Technology, SUSL : Status and Future







Faculty of Technology



Faculty of Technology is the seventh faculty of the Sabaragamuwa University of Sri Lanka



FACULTY OF TECHNOLOGY





FACULTY OF TECHNOLOGY

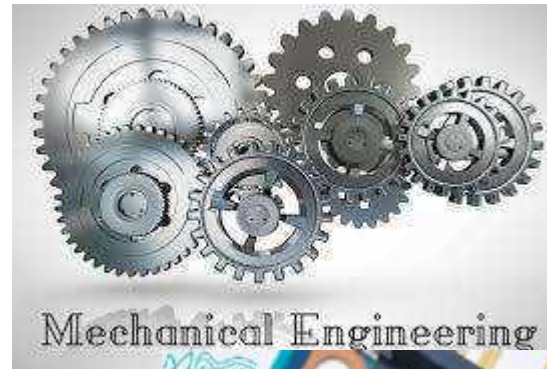
Faculty of Technology



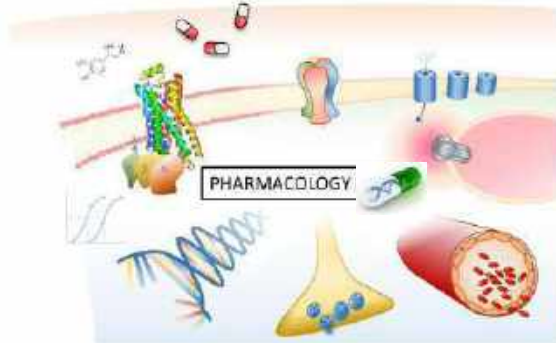
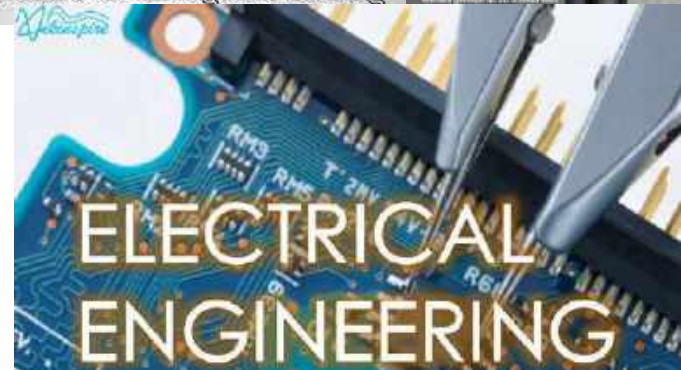
Two academic departments

□ Engineering Technology

□ Bio-systems Technology

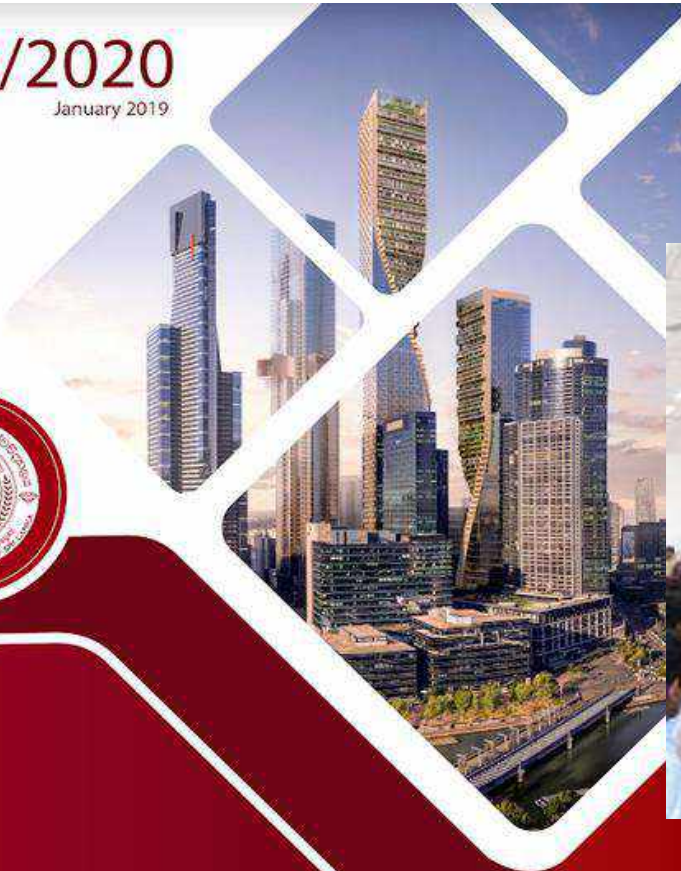


Mechanical Engineering



2019/2020

January 2019



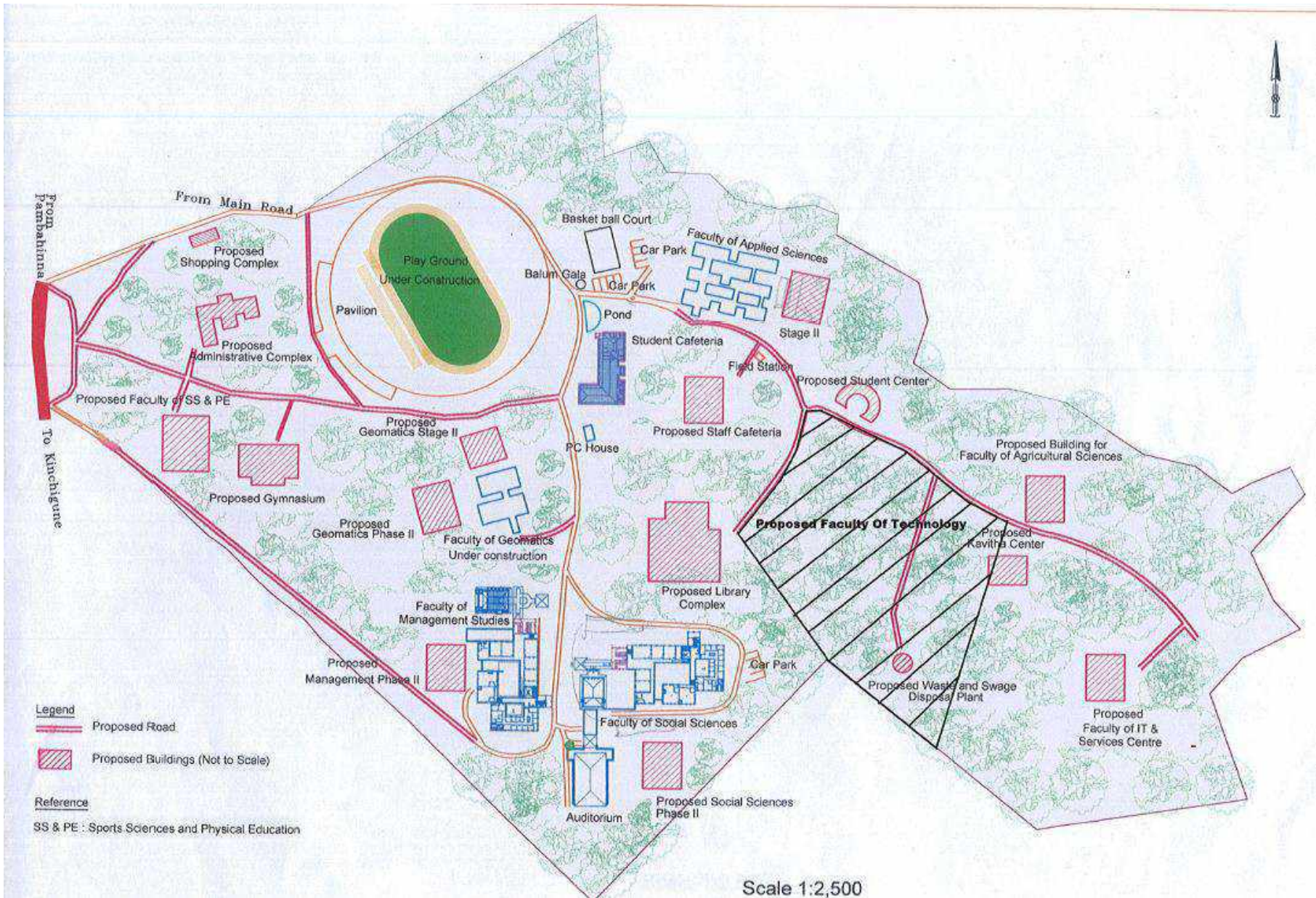
FACULTY OF TECHNOLOGY,
SABARAGAMUWA UNIVERSITY OF SRI LANKA

UNDERGRADUATE
HANDBOOK



New building

1. Location



Legend

- Proposed Road
- Proposed Buildings (Not to Scale)

Reference

SS & PE : Sports Sciences and Physical Education

Scale 1:2,500



Playground Rd

Playground Rd

University Playground

Faculty Of Applied Sciences

Fruit Juice Shop

Playground Rd

ay Bungalow

Roof-Top Cafe

Prof. Dayananda Somasundara...

New Technology Faculty Development Project in University of Sabaragamuwa
Brief Site Inspection Report

(23rd March 2017)

The proposed development land consists of 2 plots (given in the site survey plan). The land is bounded on the northern side by the lot D, F, E, H, I, J. Eastern boundary is consist with lot No 51, 75,572,299,360,304,323. The southern boundary adjoins with lot No 360,303,323,322,321 and 320. The western boundary is adjacent to Lot 322,321,320 and lot A, D F, and E.



Figure 2: Proposed development land



New building

2. Specifications

Indicative requirements for Buildings (Technology Faculty)- Phase 1 (2018 Dec- 2020/March)				2019-2020
Spaces	Seating Capacity	Floor Area in Sq. F	Number of Rooms	Total area Sq.F
Class rooms (Type 1)	100	2,000	4	8000
Class rooms (Type 2)	40	1,000	6	6000
Mechanical Lab (with workshop)	40	4,000	1	4000
Electrical Lab (with workshop)	25	4,000	1	4000
Automobile Lab (with workshop)	25	4,000	1	4000
Biotechnology Lab	40	2,000	1	2000
Pharmacology Lab	40	2,000	1	2000
Bioenergy Lab	40	2,000	1	2000
Pharmaceutical	40	2,000	1	2000
Microbiology Lab	40	2,000	1	2000
Workshop	1	1,200	1	1200
Departments (with storage room)	6	1200	2	2400
Dean office	8	1000	1	1000
Board room		1200	1	1200
AR room		550	1	550
Staff rooms	1	120	30	3600
Computer admin office (with seating area for instruct)		400	1	400
Reading room	50	1,200	1	1200
Student common room	30	500	1	500
Exam halls	100	7000	2	14000
Generator house		1,000	1	1000
Entrance Lobby with counter/ security point/ Toilet		1200	1	1200
Security office	2	100	1	100
Other (25%)				16088
TOTAL AREA				80438

Indicative requirements for Buildings (Technology Faculty)- Phase 2 (2019/Dec - 2021 March)

Spaces	Seating Capacity	Floor Area in Sq. F	Number of Rooms	Total area
Class rooms (Type 1)	100	2000	4	8000
Class rooms (Type 2)	40	1000	4	4000
Computer laboratory	100	3000	1	3000
Chemistry lab (100 students)	100	3400	1	3400
Physics lab	100	3120	1	3120
Biology lab	100	4650	1	4650
Staff rooms	1	120	24	2880
Staff rooms with attached washrooms	1	160	10	1600
Reading room	50	1200	1	1200
Auditorium	200	4500	1	4500
Staff common/dining room	650	650	1	650
UI Colleberation center	25	920	1	920
Conference and Journal office	1	400	1	400
Library	50	3500	1	3500
Cafeteria	50	3000	1	3000
Other (25%)				11205
TOTAL AREA				56025

requirements for Buildings (Technology Faculty)- Phase 3

2021-2022

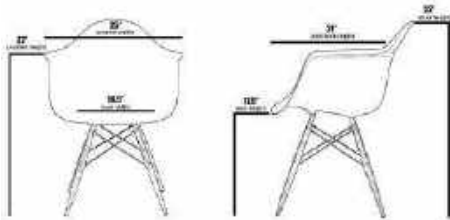
	Seating Capacity	Floor Area in Sq. F	Number of Rooms	Total area Sq.F
Nano technology research center	25	2,500	1	2500
Robotics	25	2,500	1	2500
Measurement	50	2,500	1	2500
Agro technology	25	2,500	1	2500
Drug synthesis	25	2,500	1	2500
Sustainable energy	25	2,500	6	15000
Class rooms (new)	25	1,200	6	7200
Staff rooms	1	120	10	1200
Reading room (new)	50	1,600	1	1600
R& D center		6,000	1	6000
Other (40%)				15000
TOTAL AREA				58500

Lecture rooms with tablet arm chair : 16 SF/Station

20 GSF/student



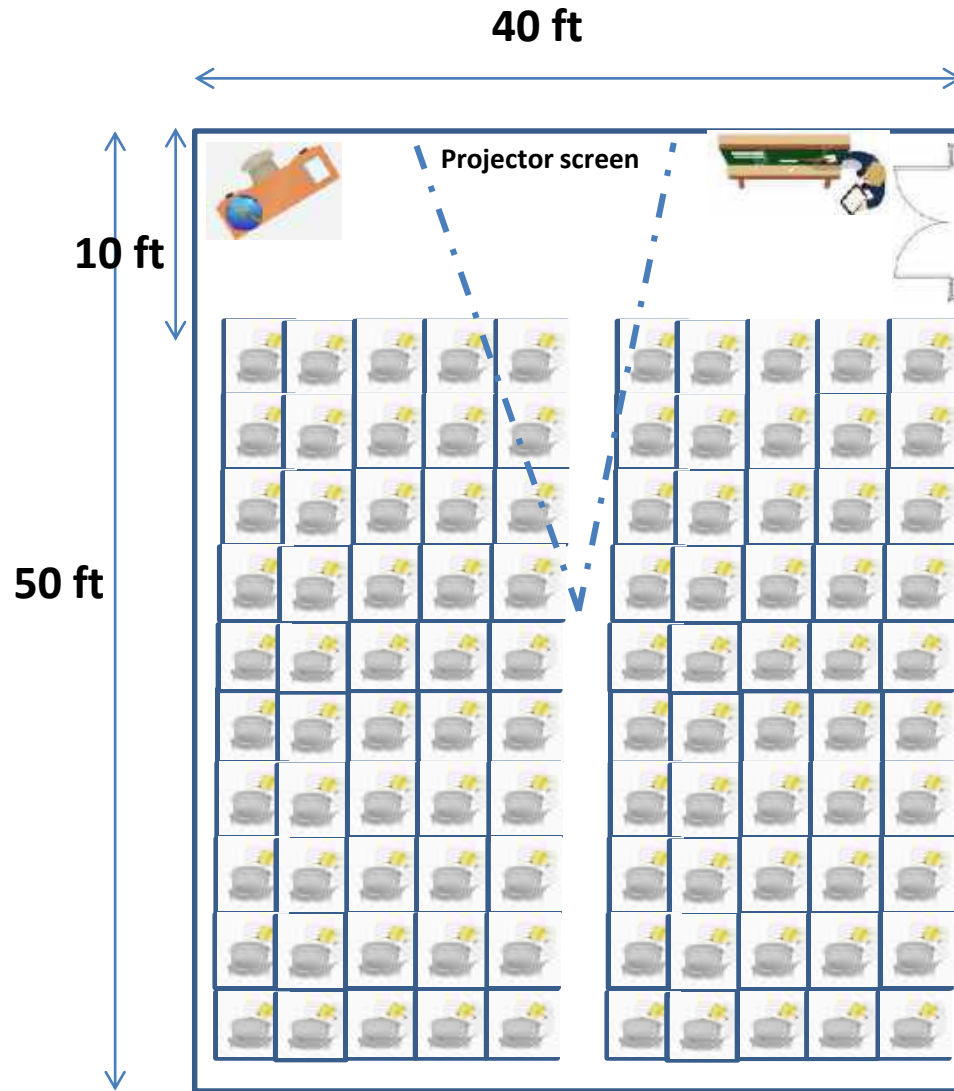
Approximate Dimensions



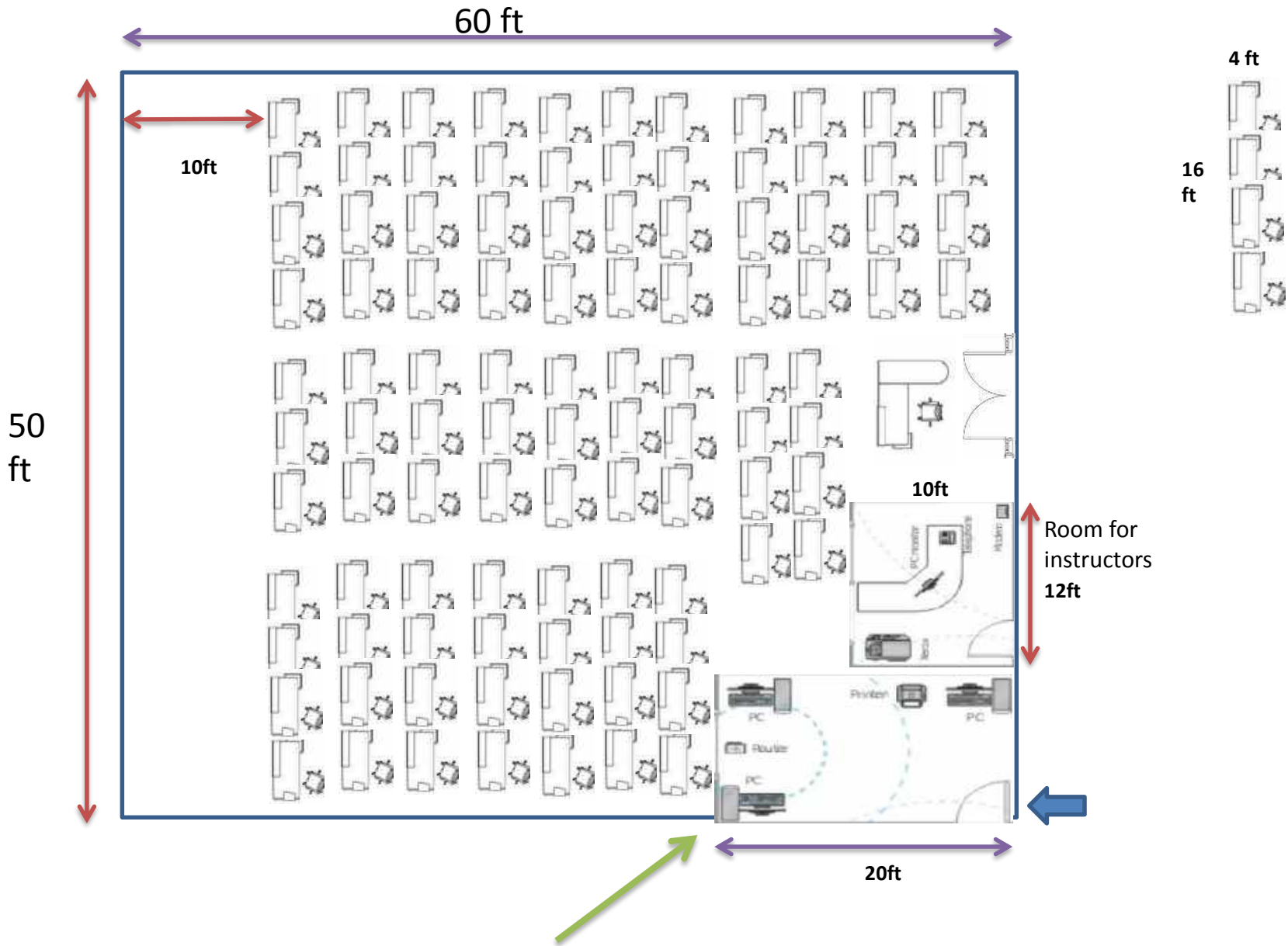
16 SF/station considering XY space
(with out XY space 9 ASF/student)



Drawing: 1" = 10 ft

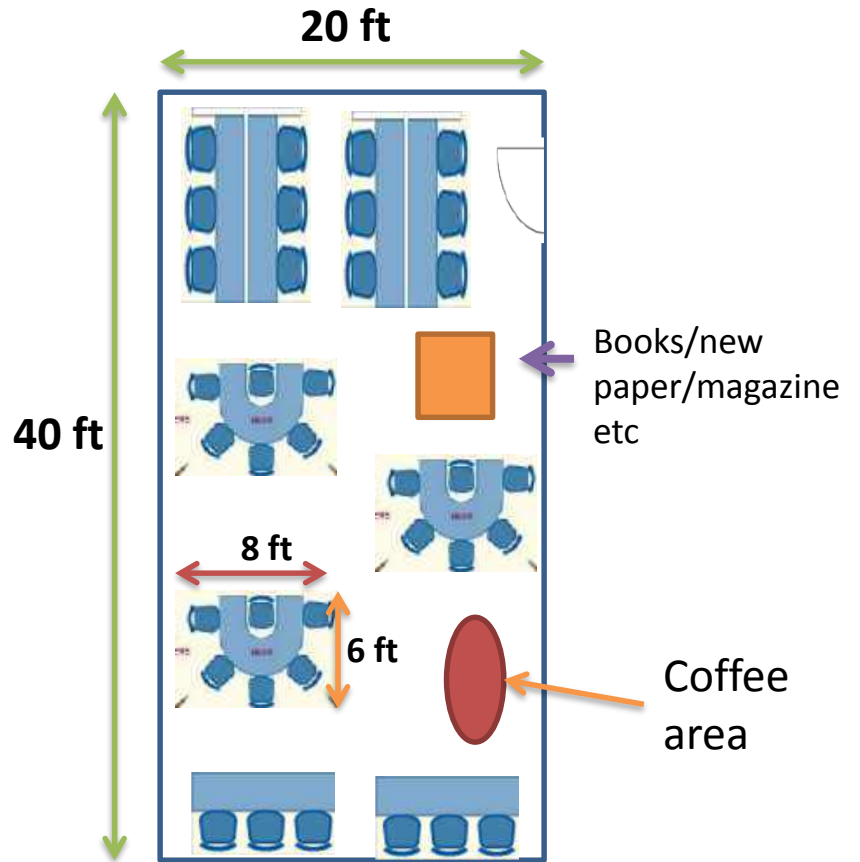


Computer laboratory	100	3,000	45,000,000	1
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Computer admin office	200	3,000,000	1
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Student common room	50	800	12,000,000	1
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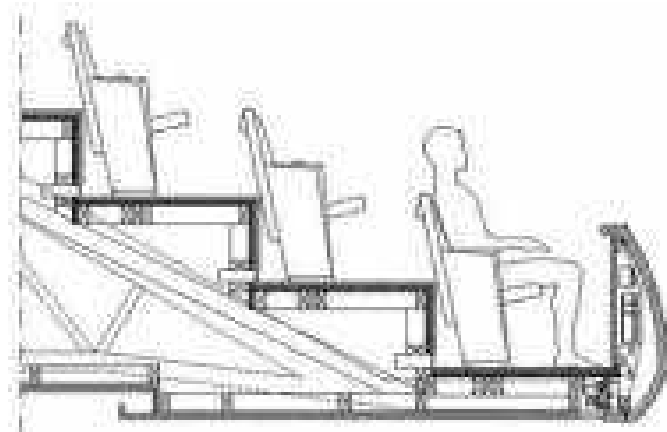


Standard:

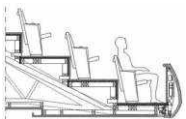
Auditorium rooms typically require 10-15 ASF/student

And

require double height space to accommodate tiered seating.

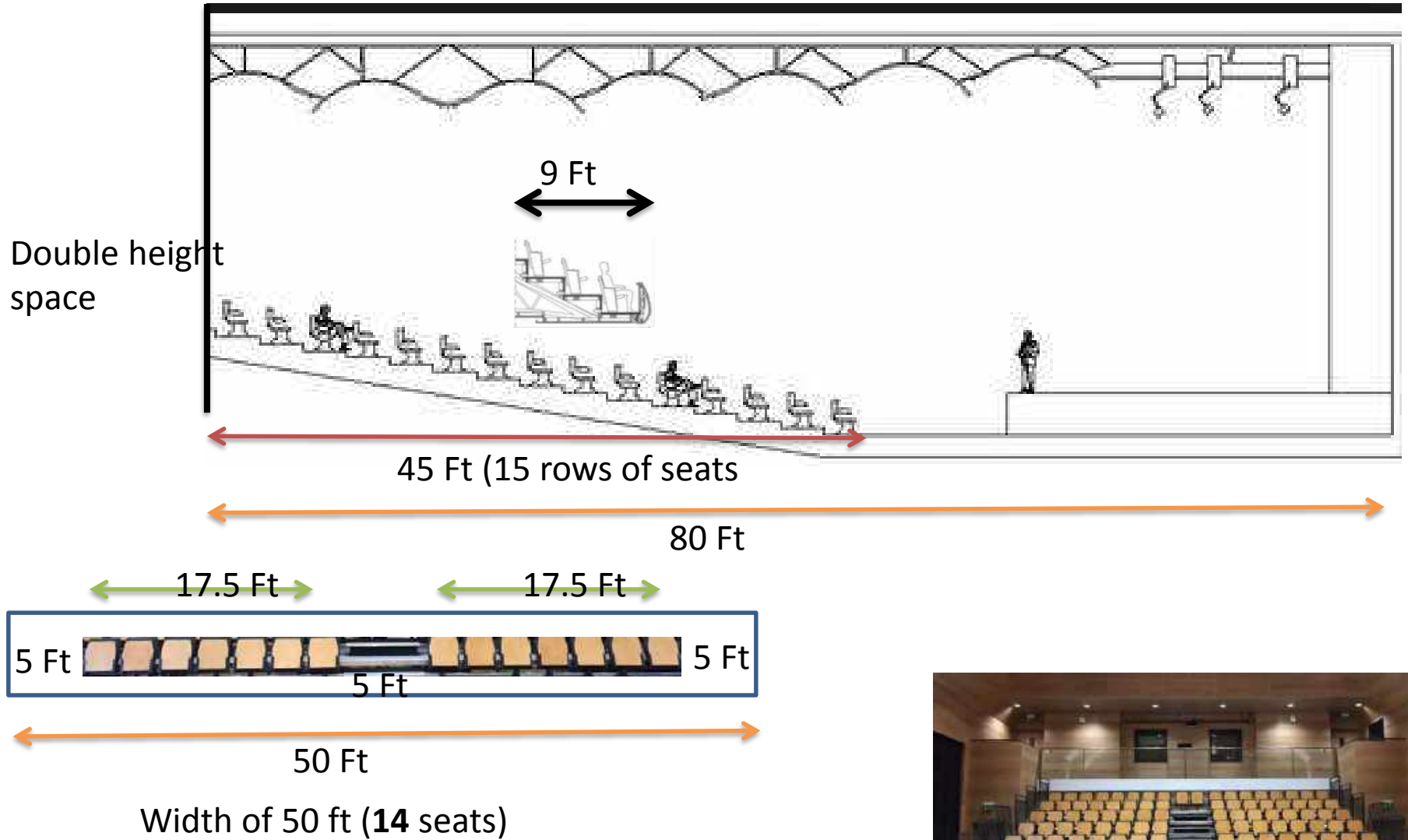


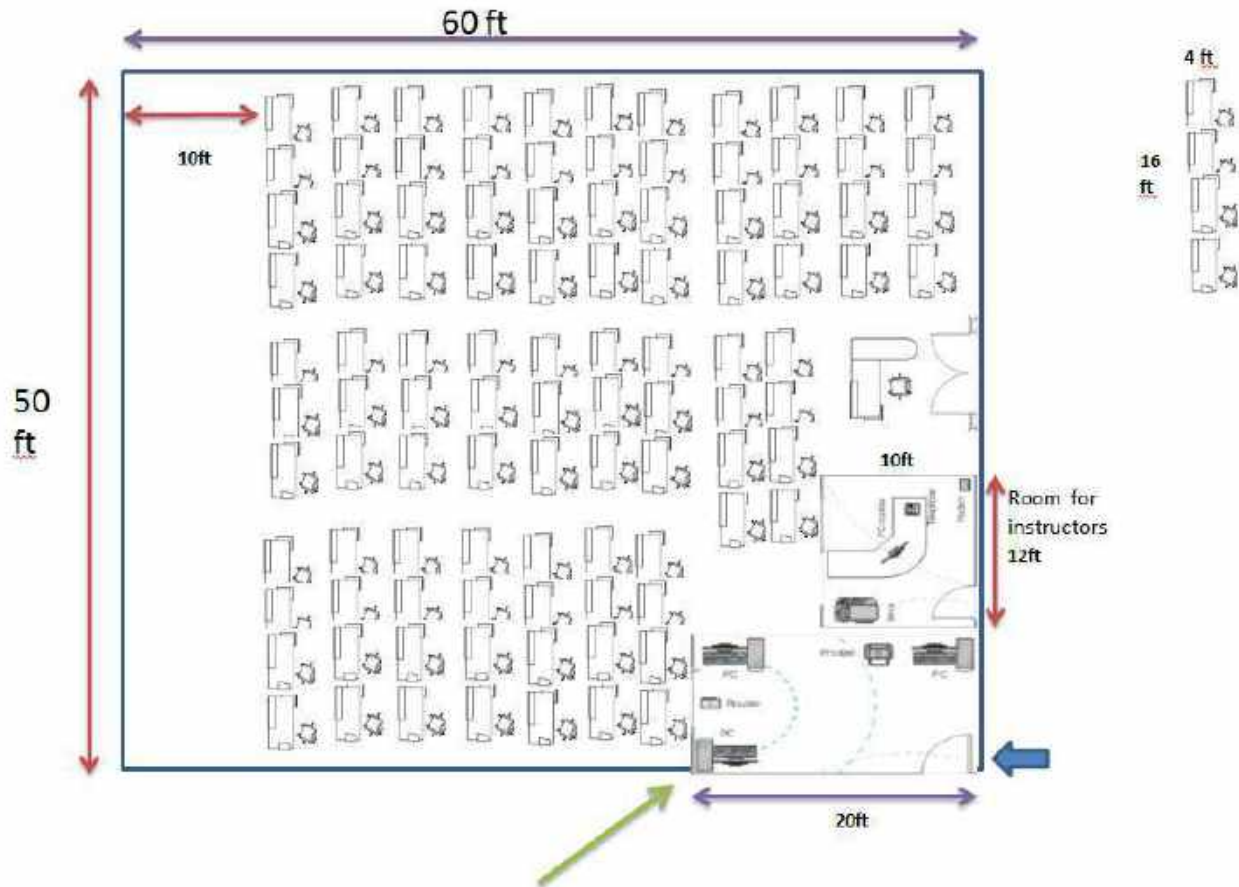
9 Ft

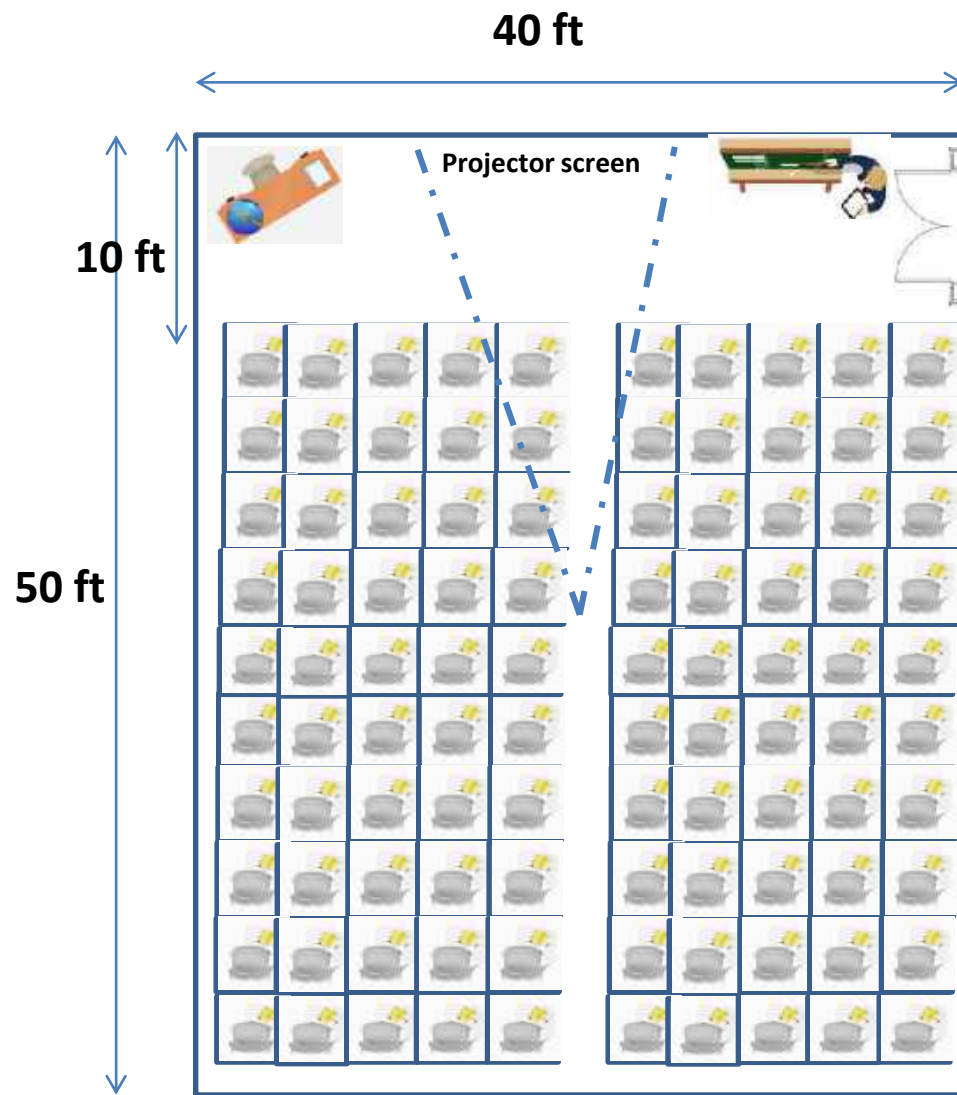


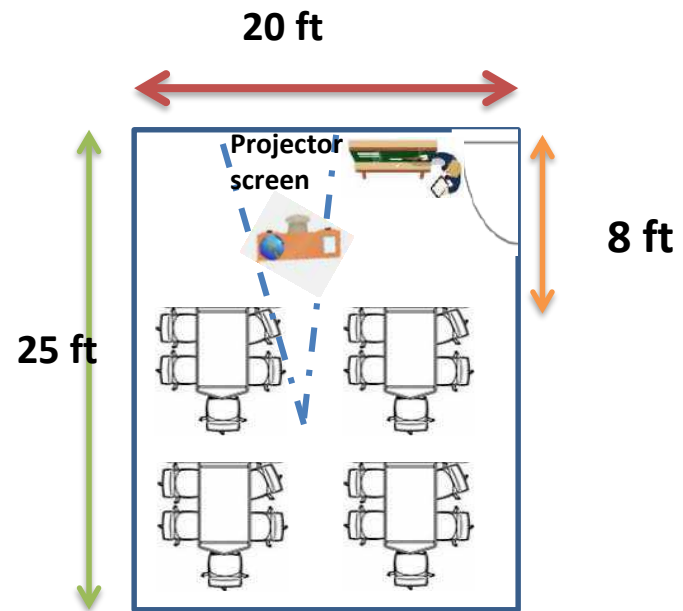
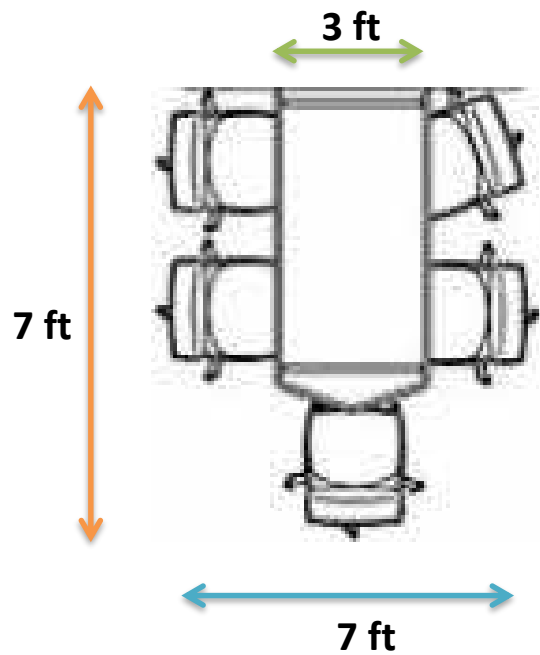
10 ASF/student

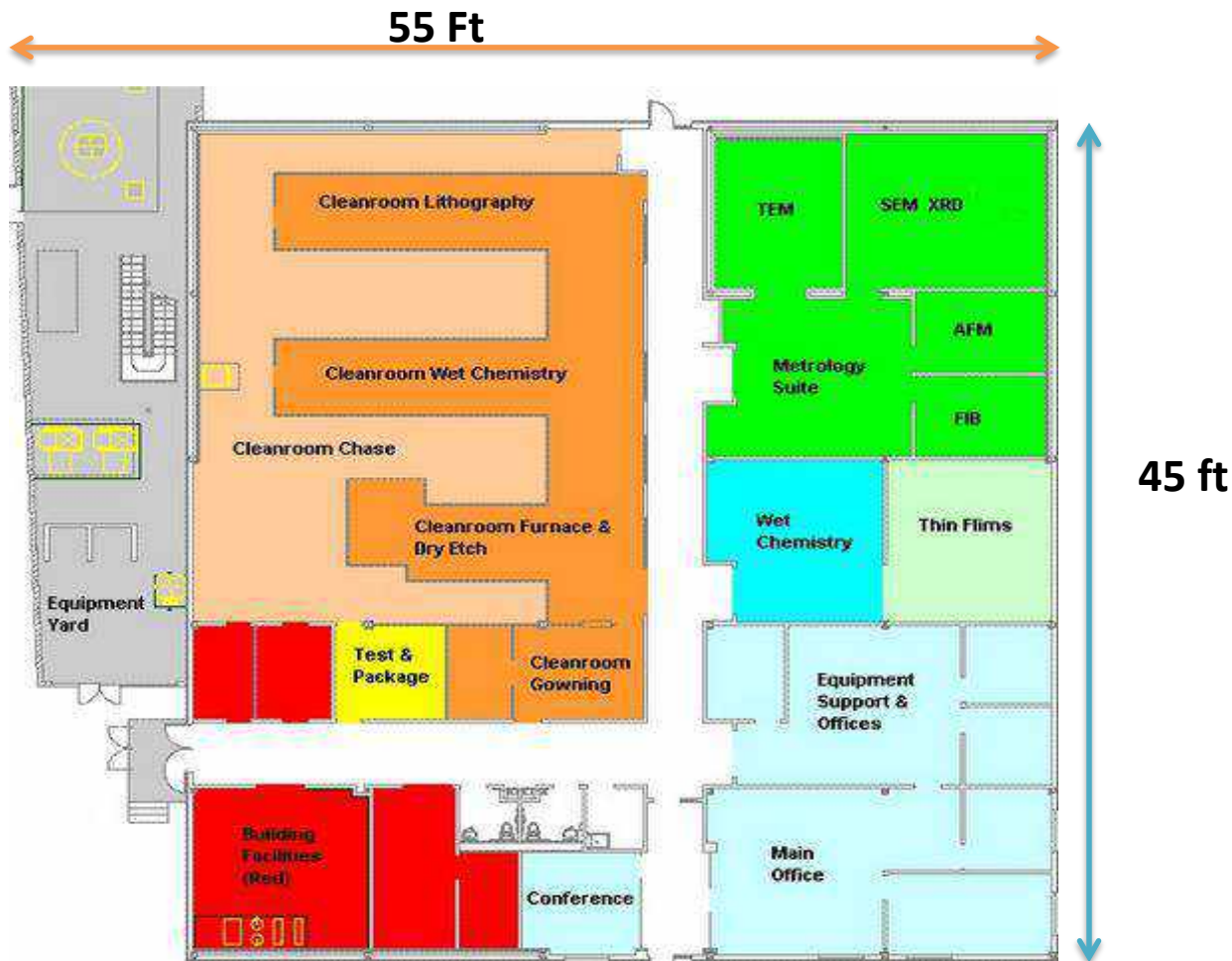
GSF :4000 SF

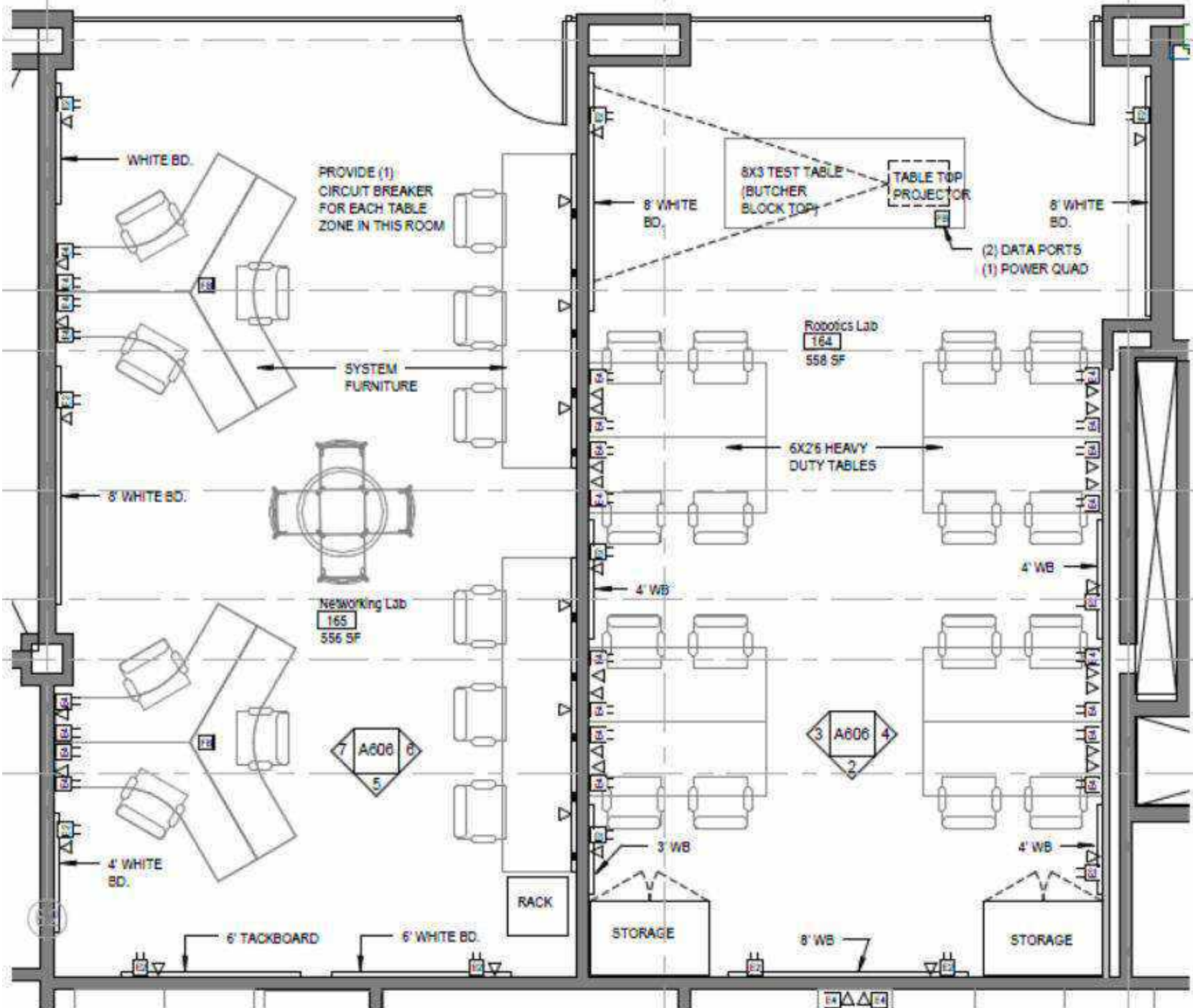












Building template for the Faculty of Technology, SUSL

Employer requirement template – Laboratories

Room Ref.:

Room category: Science Laboratory

Room type: Wet Lab

Science on Display: Yes

Capacity: Students: 100, Staff: 5, Other: 3

No. of units: 1

Space norm: 2.7 m²/student

1. General information: Room name, Location, Level, etc.

2. Structure and layout: Number of rooms, etc.

3. Structure: 3.1. Structure, 3.2. Structure, 3.3. Structure

4. Structure: 4.1. Structure, 4.2. Structure, 4.3. Structure

5. Structure: 5.1. Structure, 5.2. Structure, 5.3. Structure

6. Structure: 6.1. Structure, 6.2. Structure, 6.3. Structure

7. Structure: 7.1. Structure, 7.2. Structure, 7.3. Structure

8. Structure: 8.1. Structure, 8.2. Structure, 8.3. Structure

9. Structure: 9.1. Structure, 9.2. Structure, 9.3. Structure

10. Structure: 10.1. Structure, 10.2. Structure, 10.3. Structure

11. Structure: 11.1. Structure, 11.2. Structure, 11.3. Structure

12. Structure: 12.1. Structure, 12.2. Structure, 12.3. Structure

13. Structure: 13.1. Structure, 13.2. Structure, 13.3. Structure

14. Structure: 14.1. Structure, 14.2. Structure, 14.3. Structure

15. Structure: 15.1. Structure, 15.2. Structure, 15.3. Structure

16. Structure: 16.1. Structure, 16.2. Structure, 16.3. Structure

17. Structure: 17.1. Structure, 17.2. Structure, 17.3. Structure

18. Structure: 18.1. Structure, 18.2. Structure, 18.3. Structure

19. Structure: 19.1. Structure, 19.2. Structure, 19.3. Structure

20. Structure: 20.1. Structure, 20.2. Structure, 20.3. Structure



Building complex for the Faculty of Technology, SUSL

Room Ref.:

Employer's requirement template – Laboratories

Space category	Science Laboratory – Chemistry laboratory
Type	Wet Lab
Science on Display*	Yes

Capacity	No. of units
Students: <u>100</u>	Space norm 2.7 m ² /student
Staff : <u>5</u>	
Other : <u>3</u>	







Teaching Laboratories





BUILDING A - ADMINISTRATIVE BLOCK (G + 2)

Deans office		Dean's room with wash room and admin staff
Board Room		Board Room + Small lobby & pantry
Departments with storage		6 persons in each department
AR Room		
Computer Admin Center		server with confidential information
Academic Staff Room		Area to be divided into 30 cubicles / work station
Entrance		lobby , counter & security point
Toilets (Staff) closet		

SUB TOTAL**ADD 25% CIRCULATION****TOTAL AREA****BUILDING B (G + 2) & C (G + 3) ACADEMIC BLOCK**

TYPE 1 Class Room		with desk & chair, straight) layout
TYPE 2 Class Room		with desk & chair , changeable layout
Reading Room		
Academic Staff Rooms		24 Cubicles , could be in different levels
Common Staff Room		
Staff toilets		Could be distributed among different levels
Student Common Room		Could be in 2 different levels at centre
Student Toilets		Could be in 2 levels at centre

SUB TOTAL**ADD 25% CIRCULATION****TOTAL AREA****BUILDING D - LIBRARY & OTHER COMMON SPACES**

UI collaboration centre		May share a common lobby at Ground floor
Conference & Journal office		
Staff recreation		At Ground Floor
Library		Double height space with a70% Mezzanine level

SUB TOTAL**ADD 25% CIRCULATION****TOTAL AREA****BUILDING D - LIBRARY & OTHER COMMON SPACES (G + 2)**

UI collaboration centre		May share a common lobby at Ground floor
Conference & Journal office		
Staff recreation		At Ground Floor
Library		Double height space with a70% Mezzanine level

SUB TOTAL**ADD 25% CIRCULATION****TOTAL AREA****BUILDING E - AUDITORIUM (ONE TIERED LEVEL , DOUBLE HEIGHT)**

Auditorium		300 seats & Stage	1.0m2 per person.
		Lobby & Toilets	

SUB TOTAL**ADD 25% CIRCULATION****TOTAL AREA****BUILDING F - CAFETERIA (G+ 1) 1st FLOOR PARTLY TERRACE**

Cafeteria		seating , kitchen& stores , serving areas but excluding open terrace seating.	1.5 m ² per persons
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SUB TOTAL**ADD 25% CIRCULATION****TOTAL AREA****BUILDING G- LABORATORY BLOCK (G+3) Ground floor & 1st Floor**

Mechanical Lab		excluding workshop
Automobile Lab		excluding workshop
Electrical Lab		with workshop
Bio - energy Lab		
Bio - Technology Lab		requires green house on open to sky terrace
Pharmacology Lab		
Pharmaceutical Lab		
Microbiology Lab		

SUB TOTAL**ADD 25% CIRCULATION****TOTAL AREA****BUILDING H-MIXED USE (Laboratories , Exam Hall & Parking) (G+3**

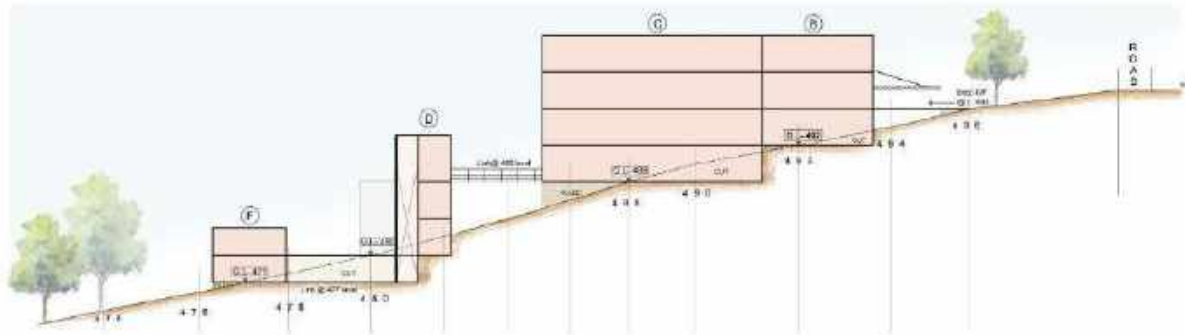
Parking & Minor Staff Toilets		At Ground floor Roading & one parking ine on one side	Please refer Section xxx
Exam Hall		Top Most floor (3 rd Floor)	
Computer Lab		Can Share - 2nd Floor	
Chemistry Lab			
Biology Lab		Can Share - 1st Floor	

SUB TOTAL**ADD 25% CIRCULATION****TOTAL AREA of the storied building**

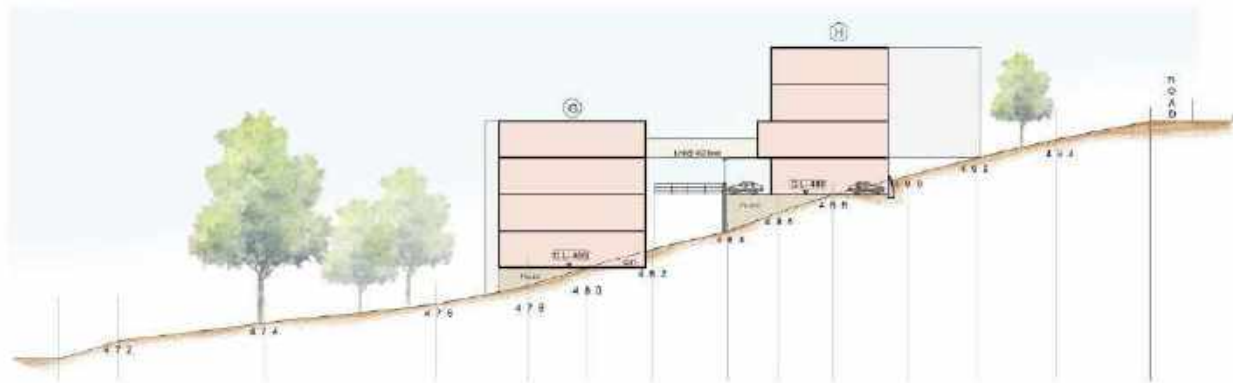


NOTES :

- This layout should be read in conjunction with the AREA SCHEDULE
- The levels indicated refer to the contour plan prepared by A.A.S Amarasakara- Registered licensed surveyor dated 27.06.2018



SECTION THROUGH B,C,D,F
SCALE 1 : 500



SECTION THROUGH G AND H
SCALE 1 : 500

This provide the guidance with regard to the scale and volume of buildings - Roof-escapes and the Architectural design is at the discretion of the designer.

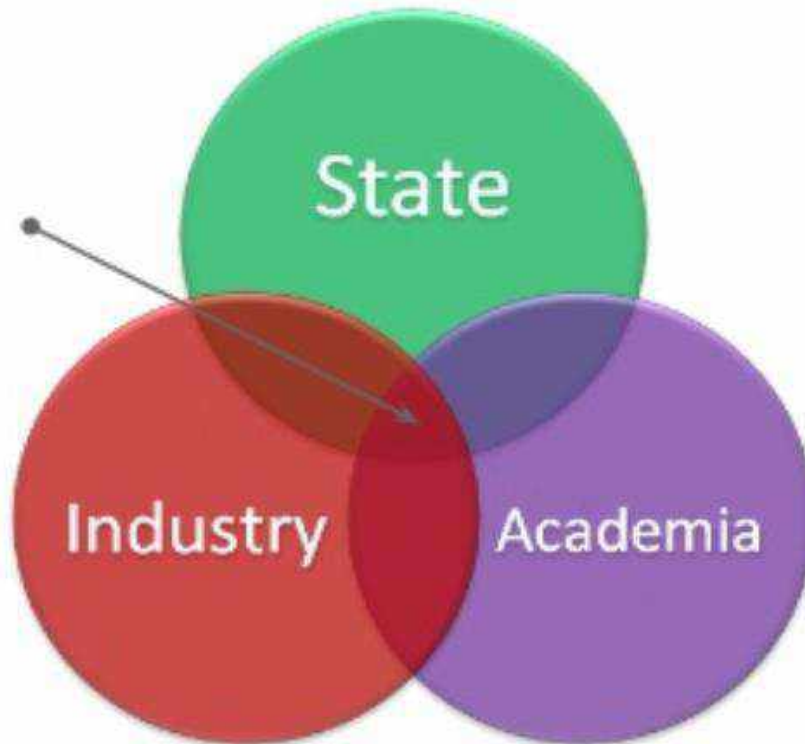


A - Administration block
B & C - Academic block
D - Library and other common spaces

E - Auditorium
F - Cafeteria

G - Engineering laboratories
H - Mixed use - parking, science laboratories & exam hall
I - Workshops

Searching for new ideas
is an endless process.



Building the ship while sailing





Sabaragamuwa University of Sri Lanka

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Tel: 0704565000