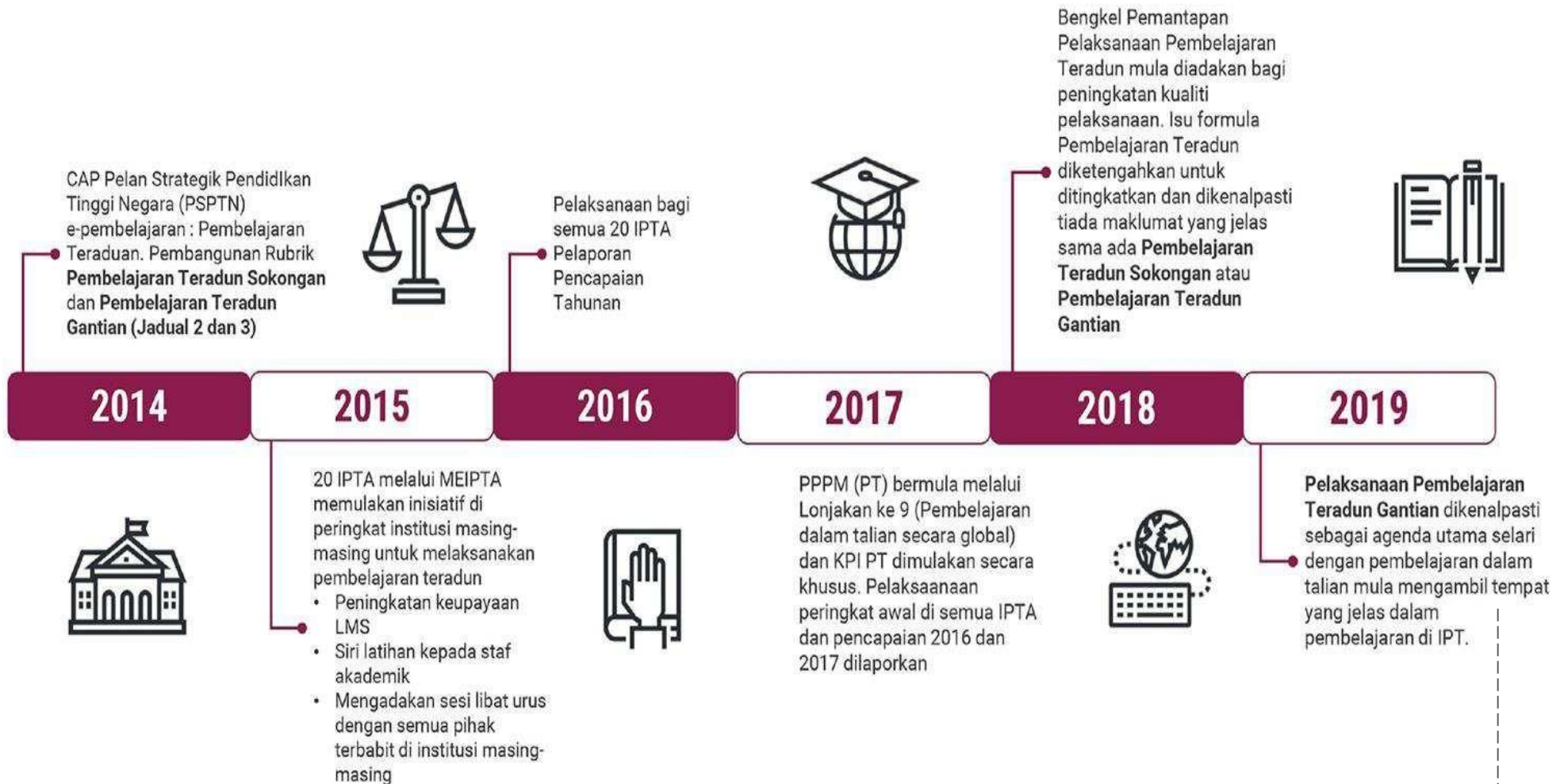


# PELAKSANAAN PEMBELAJARAN TERADUN GANTIAN (PTG)

PUSAT PENGURUSAN KECEMERLANGAN DAN INOVASI AKADEMIK (CoMAE-i)



# PELAKSANAAN PEMBELAJARAN TERADUN SEMASA BAGI IPTA - KRONOLOGI



# 4 BLENDED LEARNING (SUBSTITUTE vs SUPPORTIVE)

## OPERATIONAL DEFINITION: Substitute Blended Learning – SBL (PTG)

SBL is an approach that combines **online learning** and **face-to-face** modes in the range of **30-80%** of the **Student Learning Time (SLT)** based on the formula **40:40:20** with the combination of three main elements which are:



Learning Material



Learning Activity



Learning Assessment



Source

Buku Garis Panduan Pelaksanaan Pembelajaran Teradun Gantian (Pembelajaran Dalam Talian)  
<https://tinyurl.com/SubstituteBlendedLearning>

## Supportive Blended Learning – (Pembelajaran Teradun Sokongan - PTS)

Supportive Blended Learning (PTS) is an approach that combines **online learning** and **face-to-face** modes in the range of **30-80%** of the ~~Student Learning Time~~ based on formula **1-7-3-2**

- 1 Course info
- 7 Learning material
- 3 Learning Activity
- 2 Learning Assessment


# 4 BLENDED LEARNING (SUBSTITUTE vs SUPPORTIVE)

## OPERATIONAL DEFINITION: Substitute Blended Learning – SBL (PTG)

SBL is an approach that combines **online learning** and **face-to-face** modes in the range of **30-80%** of the **Student Learning Time (SLT)** based on the formula **40:40:20** with the combination of the main elements which are



Learning Material



Learning Activity



Learning Assessment

Source

Buku Garis Panduan Pelaksanaan Pembelajaran Teradun Gantian (Pembelajaran Dalam Talian)  
<https://tinyurl.com/SubstituteBlendedLearning>

## Supportive Blended Learning (Pembelajaran Blended Supportive - PTS)

Supportive Blended Learning (PTS) is an approach that combines **online learning** and **face-to-face** modes in the range of **30-80%** of the **Student Learning Time** based on formula **1-7-3-2**

- 1 Course info
- 7 Learning material
- 3 Learning Activity
- 2 Learning Assessment

**QUALITATIVE VS QUANTITATIVE**



# PTS vs PTG

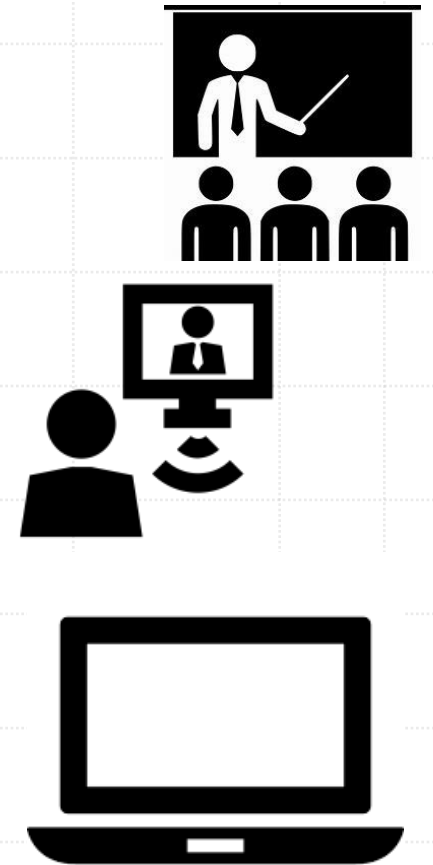
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## SOKONGAN / SUPPORTIVE

Physical in-person- real time  
Virtual (teleconferencing)- real time  
Replace (in-person/virtual) – real time, outside original schedule

## GANTIAN / SUBSTITUTE

Real time face-to-face (physical in-person / virtual via teleconferencing)  
**Self-paced**, anytime, anywhere



# PEMBELAJARAN TERADUN (BLENDED LEARNING (BL)) DALAM SURAT MAKLUMAN MQA BIL. 3/2018

TAKRIFAN KAEDAH PENGAJIAN DAN KAEDAH PENYAMPAIAN PROGRAM PENDIDIKAN TINGGI

Kaedah Penyampaian Program	Takrifan
<b>Konvensional</b>	Pembelajaran dan pengajaran secara bersemuka sepenuhnya dalam bentuk kuliah/ tutorial/ amali (termasuk pembelajaran di industri) yang dikendalikan mengikut tempoh pengajian atau dengan <b>gabungan pembelajaran dalam talian (blended learning)</b> antara <b>30% hingga 60%.*</b>
<b>Pengajian Terbuka dan Jarak Jauh (Open and Distance Learning, ODL)</b>	Pembelajaran dan pengajaran yang dikendalikan dengan komponen kursus yang dilaksanakan secara atas talian melebihi 60%.*

\*Peratusan daripada % SLT Kursus PTG dalam program

% BL dalam satu program, adalah tertakluk kepada % SLT Kursus PTG dalam satu program.

BL= Program  
PTG = Kursus



# Formula Pembelajaran Teradun (*Blended Learning, BL*) dalam program (30%-60%)

**BL**  
DALAM PROGRAM  
(30%-60%)

=

JUMLAH % PTG KURSUS

BILANGAN KURSUS PTG

# SIMULASI FORMULA BL:

Program: SM Pelancongan Islam dengan Kepujian (SMPI)

Jumlah kursus (tidak termasuk MPU): 29

BIL	KOD KURSUS	JULAT % PTG (30%-80%)
1	CDA11003	30%
2	CDA11203	50%
3	CDA22003	40%
4	CDA31503	30%
5	CDA31603	60%
JUMLAH		210%

=

210%

5 Kursus

=

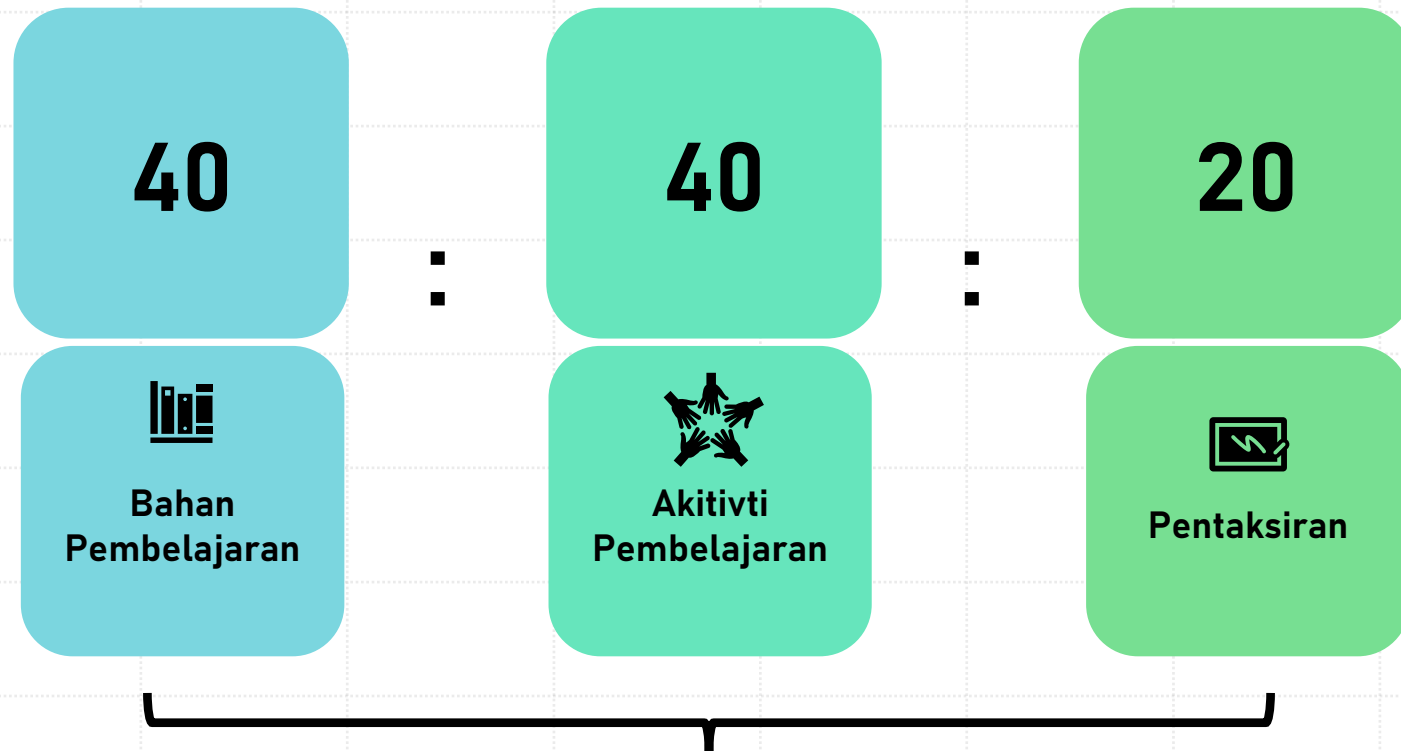
42%

**% BL bagi Program SMPI adalah 42%**  
(masih dalam julat 30%-60%)



# DEFINISI OPERASI PEMBALAJARAN TERADUAN GANTIAN (PTG)

- PTG ialah untuk **mengupayakan pembelajaran dalam talian secara berstruktur dalam julat 30-80%** daripada Jam Pembelajaran Pelajar (Student Learning Time, SLT) berdasarkan FORMULA :



Ketiga-tiga elemen ini mempunyai hubungan terus dengan **Hasil Pembelajaran Kursus** yang berkaitan dan dinyatakan secara jelas dalam rancangan pengajaran.

# PEMBELAJARAN TERADUN GANTIAN (PTG): PERINCIAN



**40%**  
**Bahan**  
**Pembelajaran**

Penggunaan bahan pembelajaran

- *Rakaman video & audio & skrin*
- *Persembahan berbentuk penceritaan*
- *Animasi dan Perisian Web 2.0*
- *Simulasi atau Realiti Maya, atau Realiti Luasan, atau Realiti Tergabung*
- *Syarahan dalam/luar kelas*
- *Kandungan interaktif*
- *Video praktikal/makmal*
- *Dan lain-lain yang bersesuaian*



**40%**  
**Aktiviti**  
**Pembelajaran**

Pelaksanaan aktiviti dalam talian menggunakan web 2.0 tool

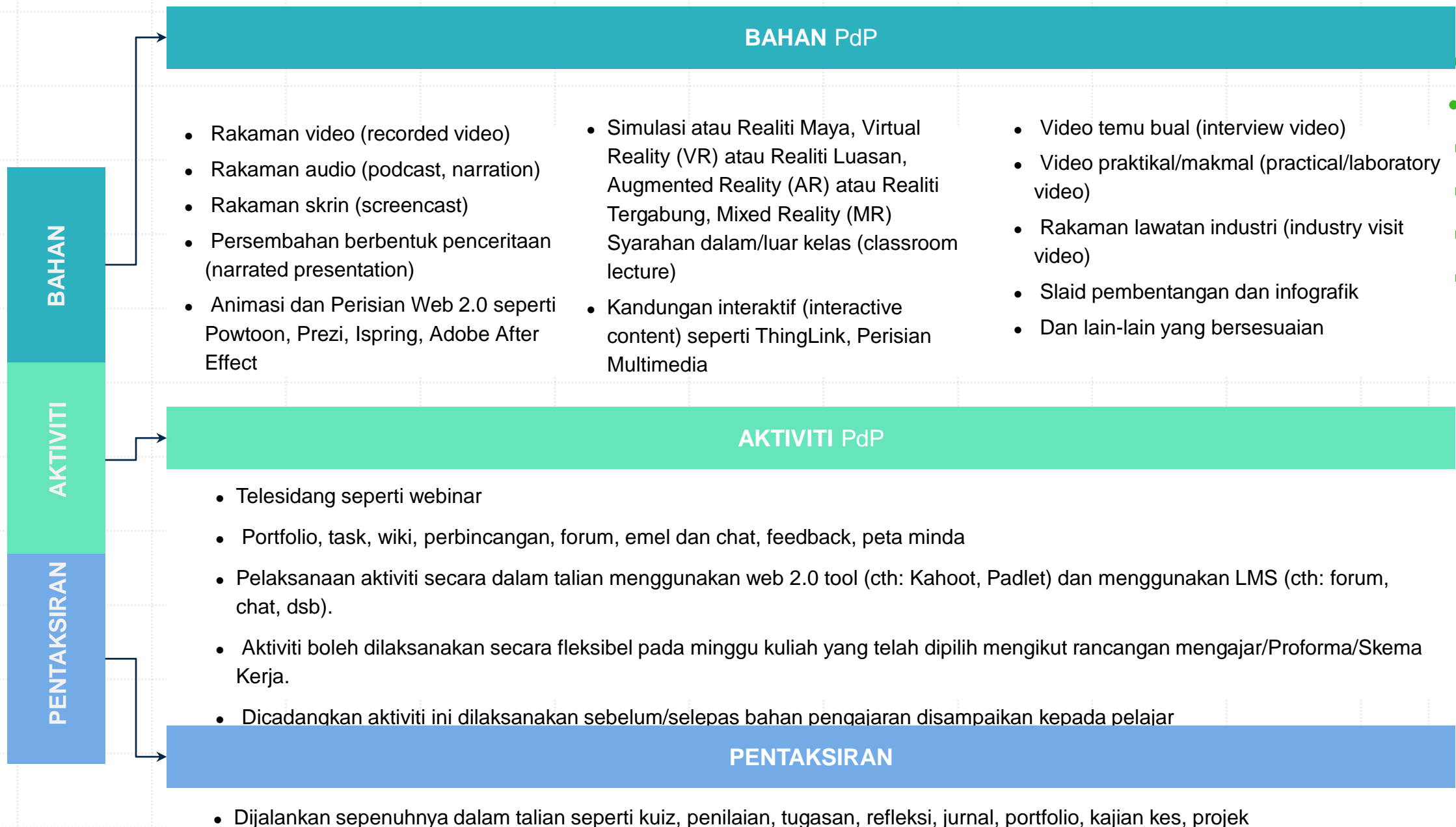
- *Kahoot*
- *Padlet*
- *LMS (cth: forum, chatting, dsb)*
- *Dan lain-lain yang bersesuaian*



**20%**  
**Pentaksiran**

Pentaksiran dalam talian

- *Kuiz*
- *Penilaian*
- *Tugasan*
- *Refleksi*
- *Dan lain-lain yang bersesuaian*



Rujuk **GARIS PANDUAN KELAS GANTIAN DALAM TALIAN**

# FORMULA PTG

**PTG**

**=**

**30%-80%**

**X**

**JUMLAH JAM  
PEMBELAJARAN  
PELAJAR  
(SLT)/KURSUS**

# SIMULASI FORMULA PTG:

Kursus 3 jam kredit (120 SLT) dengan PTG 30%

**30%**

**X**

**120 SLT**

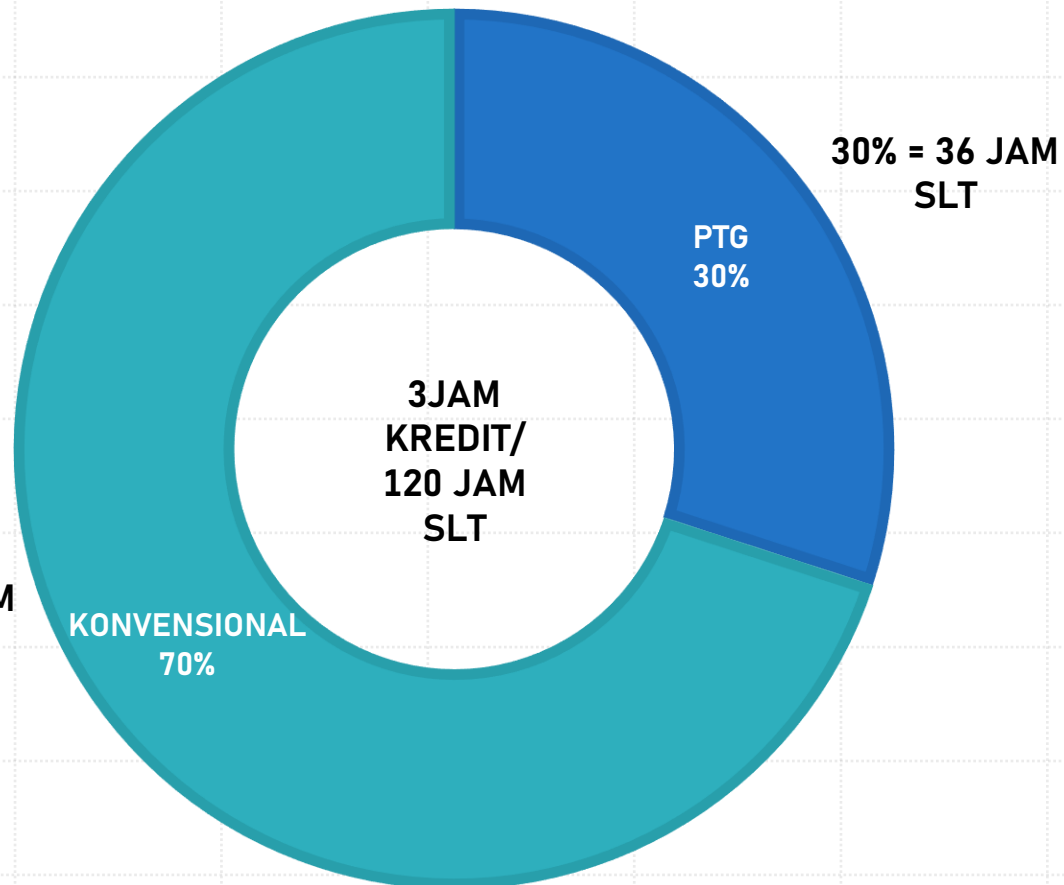
**=**

**36 JAM  
PTG**

# Simulasi 1\*:

## Kursus 3 jam kredit (120 SLT) dengan PTG 30%

■ PTG ■ KONVENSIONAL



30%

- Bahan Pembelajaran
- Aktiviti Pembelajaran
- Pentaksiran

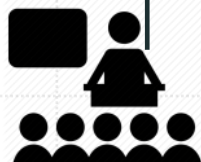
70%

- Syarahan
- Tutorial
- Makmal
- Belajar secara individual
- Pentaksiran

# SBL based on Student Learning Time (SLT)



SLT for 3 credit hours  
**120 hours**



Conventional TnL : 70% x 120 hours =  
**84 hours**



FORMULA  
**40 : 40 : 20**

SUBSTITUTE BL : 30% x 120 hours =  
**36 hours**



Lecture



Tutorial



Laboratory



Self Learning



Assessment

Guided/non guided



Material  
**40%**



Activity  
**40%**



Assessment  
**20%**



36 JAM  
PTG

ELEMEN  
% PTG

JUMLAH  
JAM PTG

X



40%  
Bahan

=

14.4  
Jam

X



40%  
Aktiviti

=

14.4  
Jam






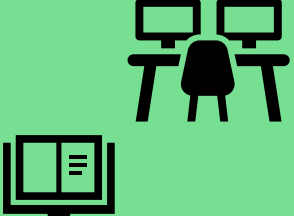
X



20%  
Pentaksiran

=

7.2  
Jam

ELEMEN % PTG	JUMLAH JAM PTG	MINGGU/TOPIK PTG	PERINCIAN ELEMEN DAN JAM PTG
 <b>40%</b> Bahan	<b>14.4 Jam</b>	<b>3,4,5,6</b>	<ul style="list-style-type: none"> <li>• Video = 6 Jam</li> <li>• Interaktif = 4.2 Jam</li> <li>• Podcast = 4.2 Jam</li> </ul> 
 <b>40%</b> Aktiviti	<b>14.4 Jam</b>	<b>3,4,5,6</b>	<ul style="list-style-type: none"> <li>• Forum (KeLiP) = 4 Jam</li> <li>• Pembelajaran Kolaboratif = 5.2 Jam</li> <li>• Aktiviti Kumpulan = 5.2 Jam</li> </ul> 
 <b>20%</b> Pentaksiran	<b>7.2 Jam</b>	<b>5,6,7,8</b>	<ul style="list-style-type: none"> <li>• Tugas = 7.2 Jam</li> </ul> 

# PENERAPAN PTG PADA RANCANGAN PENGAJARAN

Syllabus		Student Learning Time (Conventional)					Student Learning Time (Online Learning)				
Week	Chapter	Lecture	Tutorial	Lab	Self-Learning		Assessment	TnL Material	TnL Activities	Assessment	
					Guided	Non-Guided					
1	Introduction to Problem Solving				2	2					
2	Introduction to Programming	2		2	2	1					
3	Identifier, Variable Assignment					1		4	2	8	
4	Input & Output Statements					1		2	2		
5	Operator & Expression					2		3	2		
6	Control Statements Test 1	2			2	3	2				
7	Control Statements	2		2	2	1					
8	Arrays					1		3	4		
9	Arrays Mini Project					2	6	2	4		
10	Modular Programming	2		2	2	1					
11	Modular Programming	2		2	2	1					
12	Pointer	2		2	2	1					
13	File Processing Test 2	2			2	3	2				
14	Mini Project Presentation					1	1				
15	Final Exam					9	3				
Total		14	0	10	16	30	14	14	14	8	
		SLT for Conventional Learning					84	SLT for Online Learning		36	
		Overall SLT					120				

# SIMULASI 2: PTG UNTUK 2 JAM KREDIT (80 SLT)

2 JAM KREDIT (80 SLT)				
Elements on Online Learning	Weightage	SBL 30%	SBL 40%	SBL 50%
		Total SLT	Total SLT	Total SLT
Material	40%	9.6	12.8	16
Activity	40%	9.6	12.8	16
Assessment	20%	4.8	6.4	8
<b>Total hours for SBL</b>		<b>24</b> (4 weeks)	<b>32</b> (5-6 weeks)	<b>40</b> (7 weeks)
<b>Total hours for Conventional</b>		<b>56</b> (10 weeks)	<b>48</b> (8-9 weeks)	<b>40</b> (7 weeks)

# SIMULASI 3: PTG UNTUK 3 JAM KREDIT (120 SLT)

3 JAM KREDIT (120 SLT)				
Elements on Online Learning	Weightage	SBL 30%*	SBL 40%	SBL 50%
		Total SLT	Total SLT	Total SLT
Material	40%	14.4	19.2	24
Activity	40%	14.4	19.2	24
Assessment	20%	7.2	9.6	12
<b>Total hours for SBL</b>		<b>36</b> (4 weeks)	<b>48</b> (5-6 weeks)	<b>60</b> (7 weeks)
<b>Total hours for Conventional</b>		<b>84</b> (10 weeks)	<b>72</b> (8-9 weeks)	<b>60</b> (7 weeks)

# SIMULASI 4: PTG UNTUK 4 JAM KREDIT (160 SLT)

4 JAM KREDIT (160 SLT)				
Elements on Online Learning	Weightage	SBL 30%	SBL 40%	SBL 50%
		Total SLT	Total SLT	Total SLT
Material	40%	19.2	25.6	32
Activity	40%	19.2	25.6	32
Assessment	20%	9.6	12.8	16
<b>Total hours for SBL</b>		<b>48</b> (4 weeks)	<b>64</b> (5-6 weeks)	<b>80</b> (7 weeks)
<b>Total hours for Conventional</b>		<b>112</b> (10 weeks)	<b>96</b> (8-9 weeks)	<b>80</b> (7 weeks)



# **GARIS MASA PEMURNIAAN DCI PTG**

(Dr. Norlia Muhamad)



# GARIS MASA PEMURNIAAN DCI PTG





# **SIMULASI PELAKSANAAN PTG DALAM DCI PROGRAM AKADEMIK**

**UniSZA**

(Dr. Wan Anwar Fahmi Wan Mohamad)