



## Aircraft Type Training – Syllabus

# Embraer ERJ-190series (GE CF34)

T1+T2 Combined / Initial

Course - EASA Part-66 B1+B2 - Theoretical  
Course - EASA Part-66 B1+B2 - Practical





► **GENERAL**

AIRCRAFT TYPE RATING Endorsement:	<b>Embraer ERJ-190 series</b> (GE CF34)	
AIRCRAFT MODELS:	ERJ 190-100 ECJ, ERJ 190-100 IGW, ERJ 190-100 LR, ERJ 190-100 SR, ERJ 190-100 STD, ERJ 190-200 IGW, ERJ 190-200 LR, ERJ 190-200 STD	
COURSE CODE:	<b>I-XX-XX-E90-XX</b>	
DESCRIPTION:	This course is in compliance with EASA Part-66, Appendix III "Type Training and Examination Standard". The participant will acquire knowledge necessary to perform and certify maintenance tasks permitted to be carried out as certifying staff of the specified category stated in the course title. It provides detailed description, operation, component location, removal/installation, BITE and troubleshooting procedures to a maintenance manual level.	
DURATION:	<ul style="list-style-type: none"> <li>● <b>THEORETICAL face to face:</b> 25days / 150 hours               <ul style="list-style-type: none"> <li>○ <b>Distance Learning:</b> 25 days/ 150 hours, 6 hours a day</li> <li>○ <b>Examination Phases:</b> 4 days after theoretical training, in the practical site</li> </ul> </li> </ul>	<b>PRACTICAL:</b> optimum time: 10 days
NUMBER OF PARTICIPANTS:	Face to face, Max: 28 Distance Learning, Max: 15 (per Instructor or Invigilator)	Max: 15 students (per Instructor/Assessor, divided in several training groups)
TARGET GROUP:	Technical personnel associated with aircraft maintenance or engineering activities and Part-66 Category B1 & B2: Line and Base Maintenance Technician - mechanical & avionics.	
PREREQUISITES:	Basic technical English and basic technical aircraft knowledge or Category A license.	
PARTICIPATION TIME:	The minimum participation time for the trainee to meet the objectives of the course should not be less than 90% of the tuition hours of the theoretical training course. If the minimum participation time is not met, a certificate of recognition should not be issued.	

► **COURSE Theoretical**

OBJECTIVES:  
(Theoretical)

**EASA Level 1** (General Familiarisation)

A brief overview of the airplane, systems and powerplant as outlined in the Systems Description Section of the Aircraft Maintenance Manual.

**EASA Level 2** (Ramp and Transit)

Basic system overview of controls, indicators, principal components including their location and purpose, servicing and minor trouble shooting.

**EASA Level 3** (Line and Base Maintenance)

Detailed description, operation, component location, removal/installation BITE and troubleshooting procedures to maintenance manual level.

Using the distance learning, more open questions and quiz will be performed.

PLACE:

City / COUNTRY

START-END DATE  
(Theoretical Course):

**dd.mmm- dd.mmm.yyyy**

► **COURSE SCHEDULE - Theoretical** (five (5) days a week)

WEEK 1					WEEK 2					WEEK 3				
dd.mmm - dd.mmm.yyyy					dd.mmm - dd.mmm.yyyy					dd.mmm - dd.mmm.yyyy				
Phase 1	D	ATA CHAPTER (Hrs.)	Lvl.	Hrs.	Phase 2	D	ATA CHAPTER (Hrs.)	Lvl.	Hrs.	Phase 3	D	ATA CHAPTER (Hrs.)	Lvl.	Hrs.
	1	ATA 05-12 Introduction (2) a/c general (2)	1	6		1	ATA 34 (6)	3	6		1	ATA 28 (6)	3	6
		Structures (1) ATA 56 (1)	3			2	ATA 34 (6)	3			6	2	ATA 49 (5) ATA 71 (1)	
	2	ATA 25(2) ATA 31 (4)	3	6		3	ATA 22 (6)	3	6		3	ATA 72 (1) ATA 77 (2) ATA 76 (3)	3	6
	3	ATA 31 (6)	3	6		4	ATA 22 (1) ATA 23 (2) ATA 44 (1) ATA 46 (1) ATA 45 (1)	3	6		4	ATA 76 (1) ATA 73 (3) ATA 75 (1) ATA 79 (1)	3	6
	4	ATA 24 (6)	3	6		5	ATA 45 (3) ATA 52 (3)	3	6		5	ATA 79(1) ATA 78(2) ATA 74 (1) ATA 80 (2)	3	6
5	ATA 24 (6)	3	6	Phase 2 - EXAM		30	Phase 3 - EXAM		30					
Phase 1 - EXAM				30										

WEEK4		dd.mmm - dd.mmm.yyyy			WEEK5		dd.mmm - dd.mmm.yyyy		
D	ATA CHAPTER (Hrs.)	Lvl.	Hrs.	D	ATA CHAPTER (Hrs.)	Lvl.	Hrs.		
Phase 4	1	<b>ATA26</b> (4) <b>ATA 36</b> (2)	1	<b>6</b>	Phase 5	1	<b>ATA 33</b> (3) <b>ATA 38</b> (1) <b>ATA 29</b> (2)	3	<b>6</b>
	2	<b>ATA36</b> (4) <b>ATA21</b> (2)	3	<b>6</b>		2	<b>ATA 29</b> (4) <b>ATA 27</b> (2)	3	<b>6</b>
	3	<b>ATA 21</b> (6)	3	<b>6</b>		3	<b>ATA 27</b> (6)	3	<b>6</b>
	4	<b>ATA21</b> (3) <b>ATA30</b> (3)	3	<b>6</b>		4	<b>ATA 27</b> (6)	3	<b>6</b>
	5	<b>ATA30</b> (3) <b>ATA35</b> (3)	3	<b>6</b>		5	<b>ATA 32</b> (6)	3	<b>6</b>
Phase 4 - EXAM			<b>30</b>	Phase 5 - EXAM			<b>30</b>		
<b>Total (Hrs.) = 150</b>									

EXAMINATIONS:  
(Theoretical)

Phase examination, closed book, (MCQ) multiple-choice question examination type.  
 Pass mark per phase examination is **75%**

► **COURSE Practical**

OBJECTIVES:  
 (Practical)

Upon completion of the course, the participant will be able to:

- Apply the relevant safety precautions
- Identify and apply aircraft technical documentation
- Name, identify and locate aircraft system components
- Perform normal operation of aircraft systems
- Perform the servicing and ground handling
- Perform inspections and routine work
- Perform system functional/operational and on-board maintenance system supported tests
- Awareness for the use of special tooling and test equipment
- Perform rigging and adjustments
- Carry out routine through visual inspections
- Describe component removal/installation procedures unique to the aircraft type
- Determine aircraft airworthiness in accordance with MEL/CDL, and explain maintenance procedures according to the minimum equipment list (MEL)
- Correlate information for the purpose of making decisions in respect to fault diagnosis and rectification.

ASSESSMENT

One assessment per trainee will be conducted the last day, when more than 50% of the listed and complex task on each ATA chapters will be performed.

PLACE:

City / COUNTRY

START-END DATE  
 (Practical & Assessment):

**dd.mmm- dd.mmm.yyyy**

► **COURSE SCHEDULE - Practical**

START:		dd.mm.yyyy	END:		dd.mm.yyyy	
TASK TYPE		TRAINING EQUIPMENT		No. OF TASKS		
				Airframe	Engine	Avionics
<b>LOC</b>	Location	Aircraft / Simulator / Classroom		153	46	41
<b>FOT</b>	Functional / Operational Test	Aircraft / Simulator / Classroom		43	11	19
<b>SGH</b>	Service & Ground Handling	Aircraft / Simulator / Classroom		37	7	10
<b>R/I</b>	Removal / Installation	Aircraft / Simulator / Classroom		27	3	10
<b>MEL</b>	Minimum Equipment List	MEL / Classroom		14	3	7
<b>TS</b>	Trouble Shooting	Aircraft / Simulator / Classroom		19	6	6
<b>REF: A - Aircraft   S - Simulator   C - Classroom</b>		<b>Total Tasks</b>		<b>293</b>	<b>76</b>	<b>93</b>
				<b>462</b>		

ASSESSMENTS	√	PRACTICAL TRAINING DURATION
AIRFRAME or ENGINE or AVIONICS	1	<b>Optimum time:10</b> days
Assessment Review	1	

ASSESSMENT:  
(Practical)

The practical training assessment will be performed after completion of at least **50%** of the listed and complex tasks, divided in different scenario (Airframe or Engine/Propeller or Avionics).

Practical assessment will be conducted and assigned as "**passed**" or "**not passed**" the last day.

Practical training will be documented in the Practical Handbook (PH).

TRAINING MATERIAL:  
(for each student)

**(DC)** Digital Copy:

- Maintenance Training Manual (**AGT-MTM-E90**) (pdf);
- Aircraft Maintenance Documentation - samples (pdf);
- Cockpit and panels layout (print ready);

**(HC)** Hard Copy:

- Course Syllabus and Schedule
- Training Handbook
- Systems schematics
- Practical Handbook

HARDWARE:

In addition to AGT training presentation equipment, it is recommended each student to be equipped with notebook or similar portable electronic device capable to support **pdf** format reading software, in order to successfully read and review the content of training course material.

SOFTWARE:

Any available program supporting **pdf**format.  
Recommended: Adobe Acrobat Reader