Operating mode is selected by means of DIP switches on-board:

Switch status and mode selection:

	1	2	3	4	5	6	7	8
CH340 connect to ESP8266 (upload sketch)	OFF	OFF	OFF	OFF	ON	ON	ON	NoUSE
CH340 connect to ESP8266 (connect)	OFF	OFF	OFF	OFF	ON	ON	OFF	NoUSE
CH340 connect to ATmega2560 (upload sketch)	OFF	OFF	ON	ON	OFF	OFF	OFF	NoUSE
CH340 connect to Mega2560 COM3 connect to ESP8266	ON	ON	ON	ON	OFF	OFF	OFF	NoUSE
ATMega2560 + ESP8266	ON	ON	OFF	OFF	OFF	OFF	OFF	NoUSE
All modules work independent	OFF	OFF	OFF	OFF	OFF	OFF	OFF	NoUSE

Also, have switch for change of connecting port between ATmega2560 and ESP8266
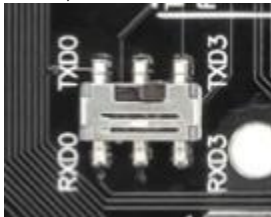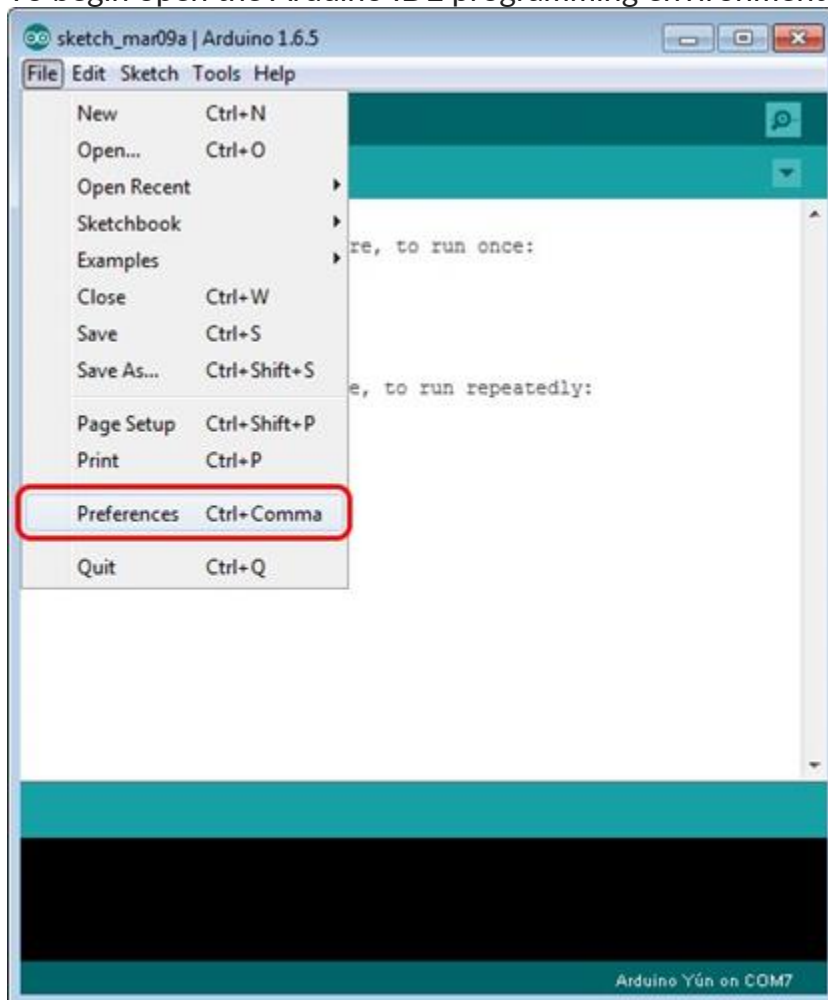

After choosing the mode of the board can proceed to set up the IDE
It is important that when the ESP8266 module is programming, it is necessary to press the button "Mode"
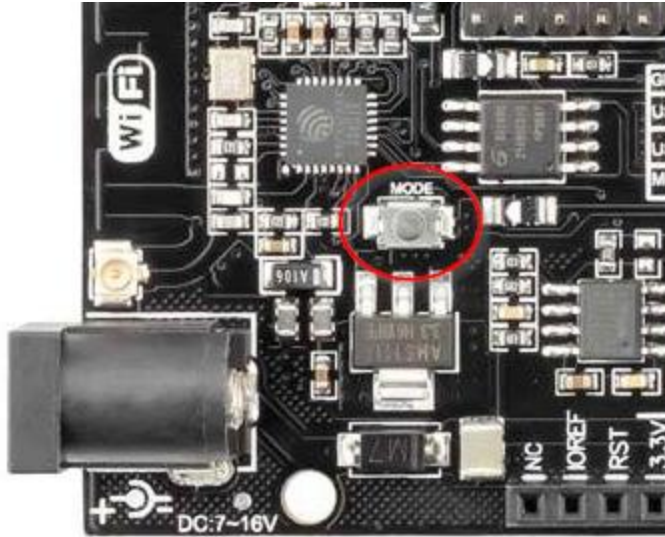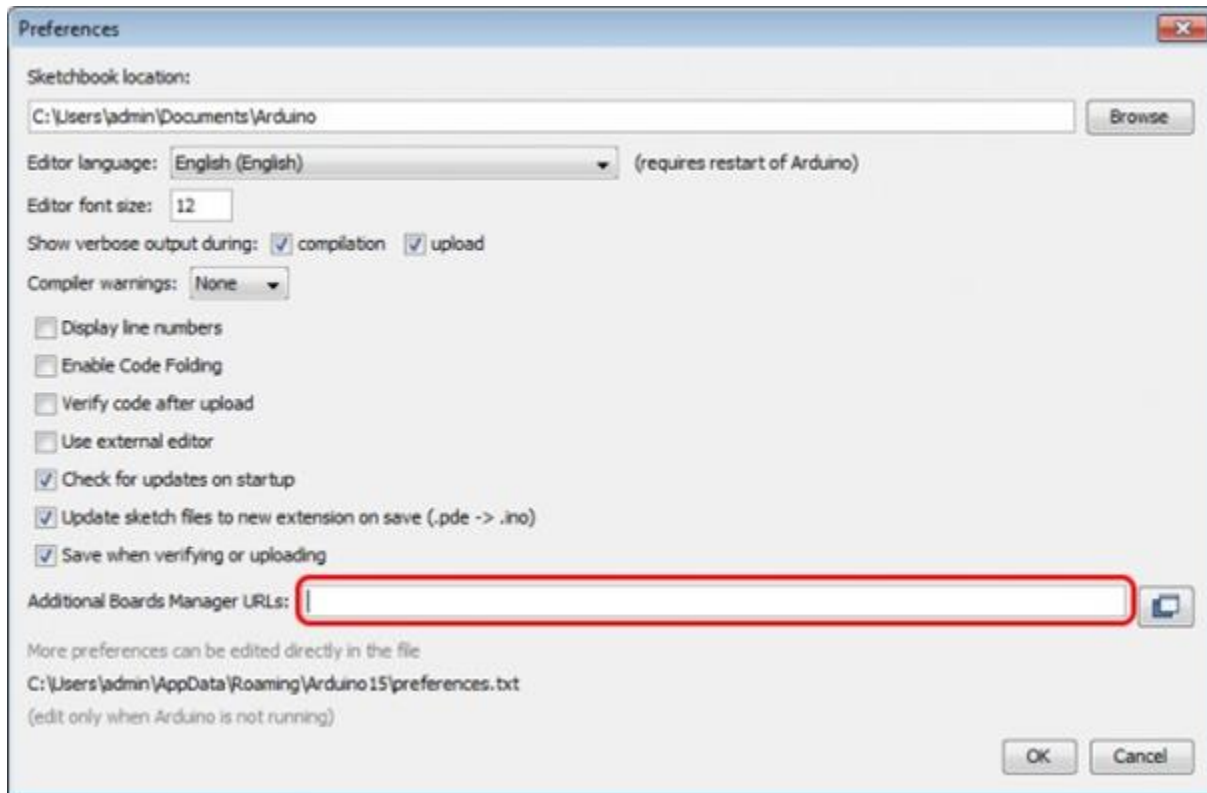
To begin open the Arduino IDE programming environment and go to settings

Then in the window that appears in the row, Additional Boards Manager URLs (marked in red) insert the below link
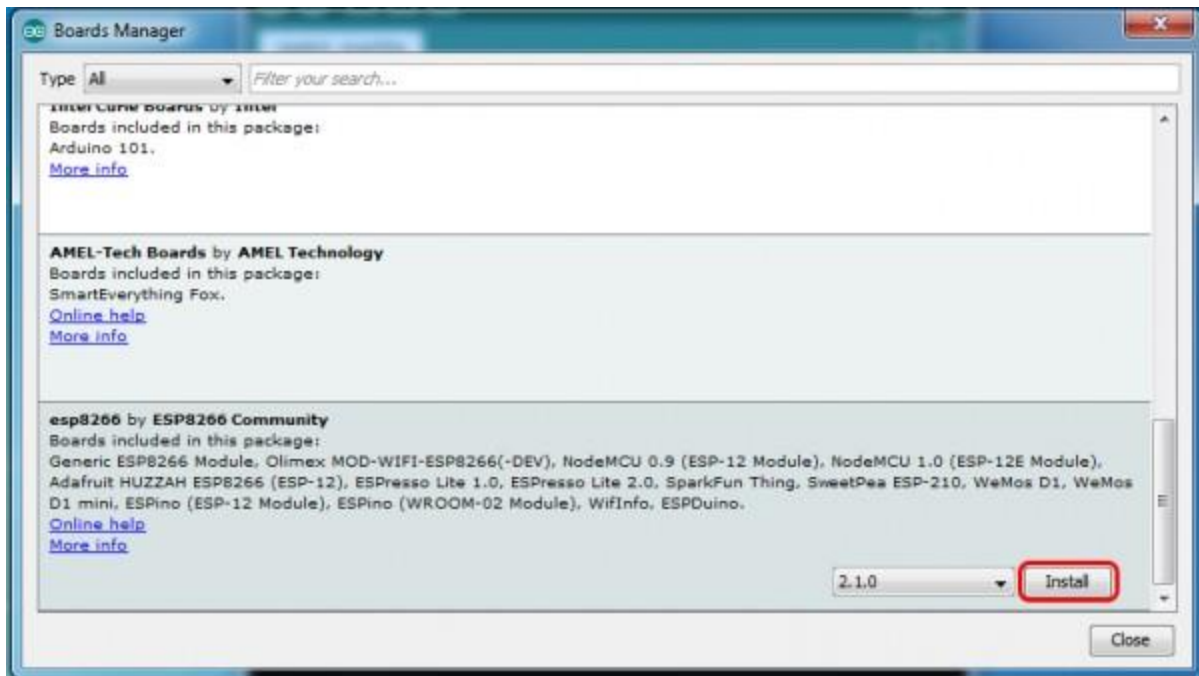
http://arduino.esp8266.com/stable/package_esp8266com_index.json
for installation in Arduino IDE additional scripts that would work with the modules
ESP8266 and click OK



Then go to the Tools> Board> Boards Manager
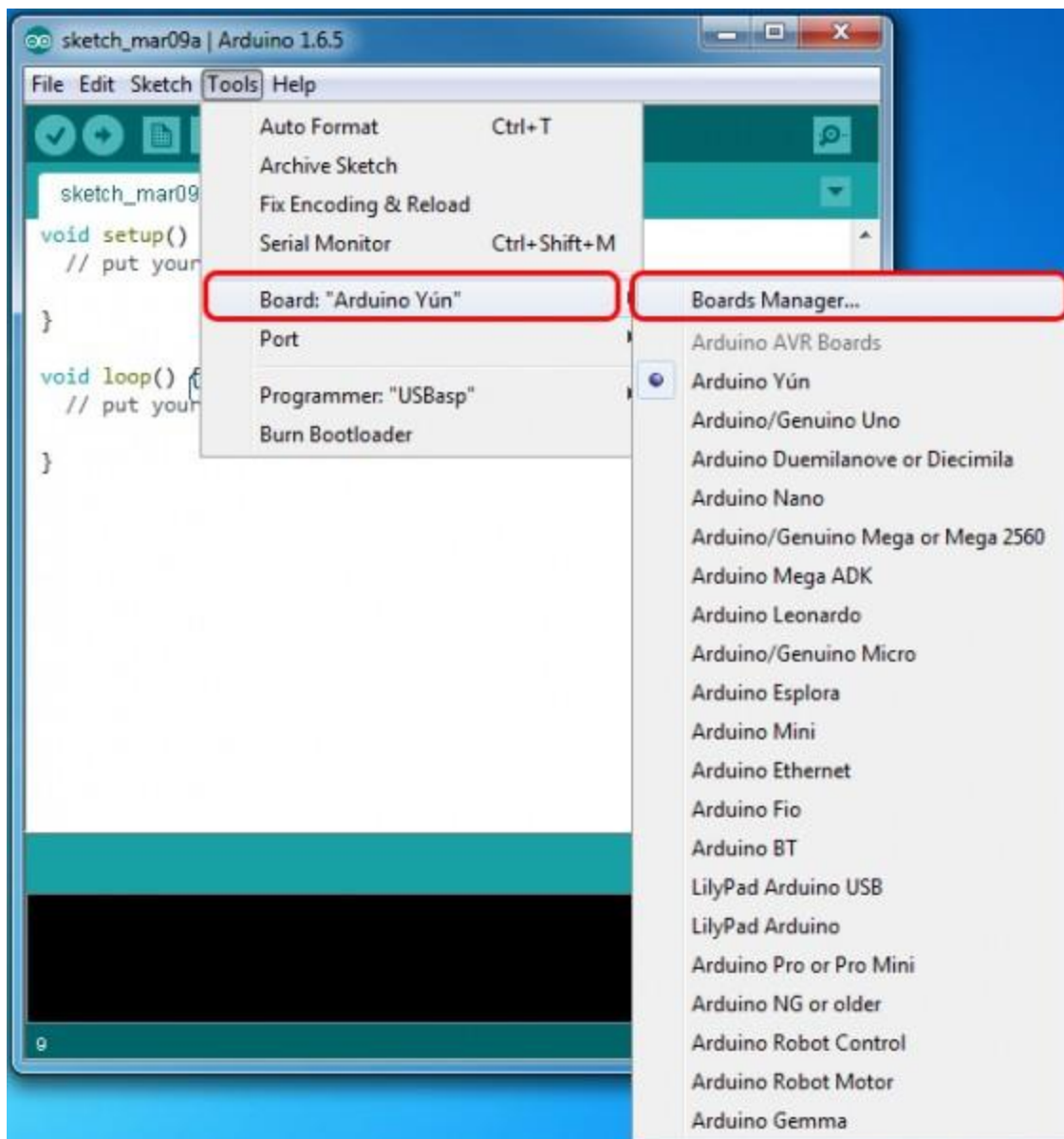
In the window that appears, scroll through the list down to the script esp8266 by ESP8266 Community and click.

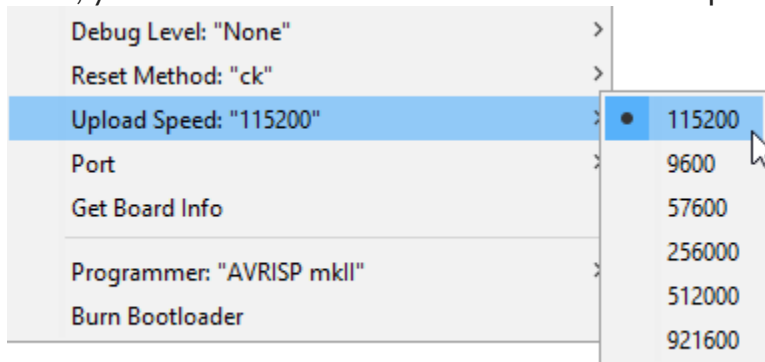In the lower right corner will be able to select the version of the software, select the version 2.1.0 (the newest) and click the Install button
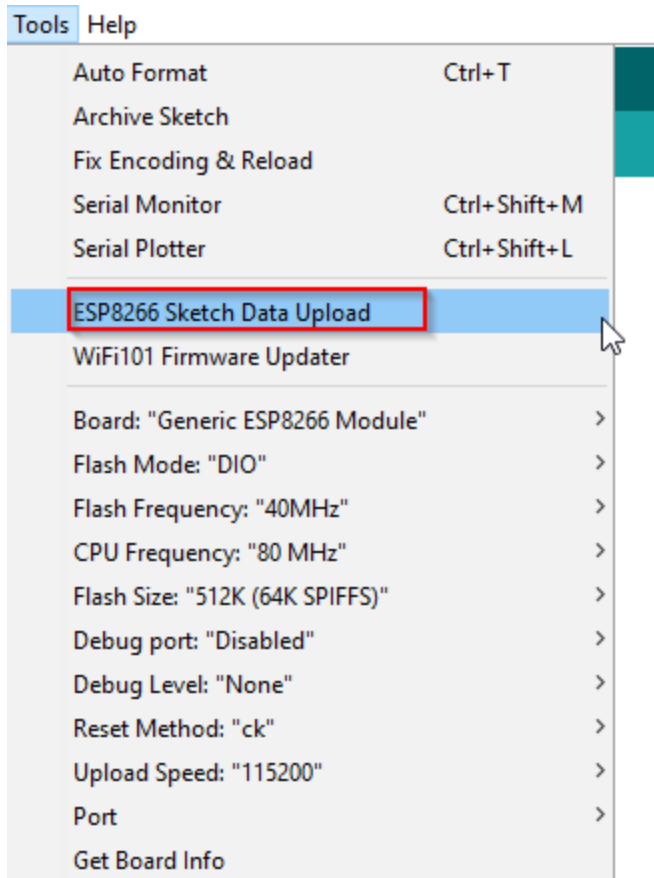

After installation, close the window and go to Tools> Board and see the list of available devices on the chip programming ESP8266
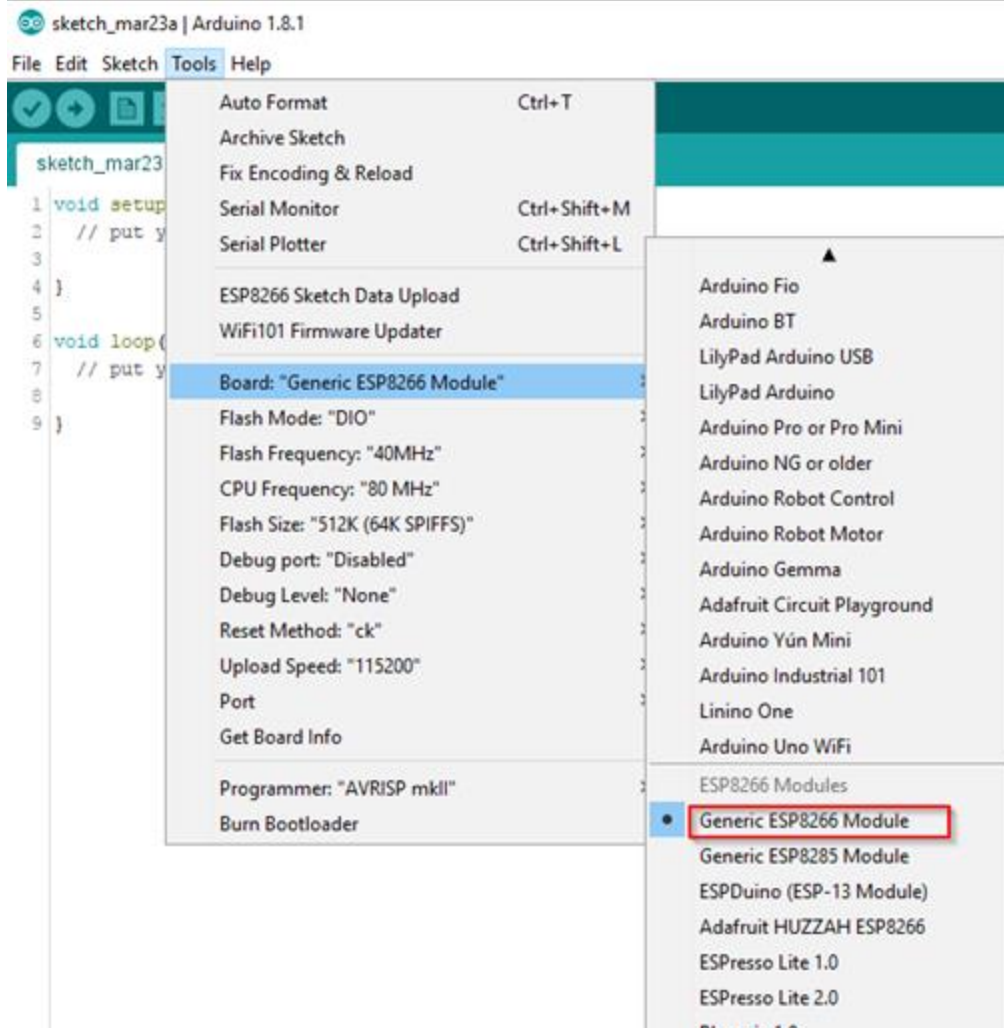
Next, you need to select the card as shown in the picture (Generic ESP8266 module)

Select the upload speed – 115200

Tools	Help	
Auto Format	Ctrl+T	
Archive Sketch		
Fix Encoding & Reload		
Serial Monitor	Ctrl+Shift+M	
Serial Plotter	Ctrl+Shift+L	
ESP8266 Sketch Data Upload		
WiFi101 Firmware Updater		
Board: "Generic ESP8266 Module"	>	
Flash Mode: "DIO"	>	
Flash Frequency: "40MHz"	>	
CPU Frequency: "80 MHz"	>	
Flash Size: "512K (64K SPIFFS)"	>	
Debug port: "Disabled"	>	
Debug Level: "None"	>	
Reset Method: "ck"	>	
Upload Speed: "115200"	>	
Port	>	
Get Board Info		

==========test sketch for ATmega2560==========

```
void setup()
{
Serial3.begin(115200);
pinMode(13,OUTPUT);
delay(500);
Serial3.println("AT+CIPMUX=1");
delay(2000);
Serial3.println("AT+CIPSERVER=1,5000");
delay(2000);
Serial3.println("AT+CIPSTO=3600");
delay(2000);
}
void loop()
{
while(Serial3.available())
{
char Rdata;
Rdata=Serial3.read();
if(Rdata=='A'|Rdata=='a')
{
digitalWrite(13,HIGH);
```

```
delay(50);
}
else if(Rdata=='B'|Rdata=='b')
{
digitalWrite(13,LOW);
delay(10);
digitalWrite(13,HIGH);
delay(10);
digitalWrite(13,LOW);
}
else
{
digitalWrite(13,LOW);
}
}
}
```